

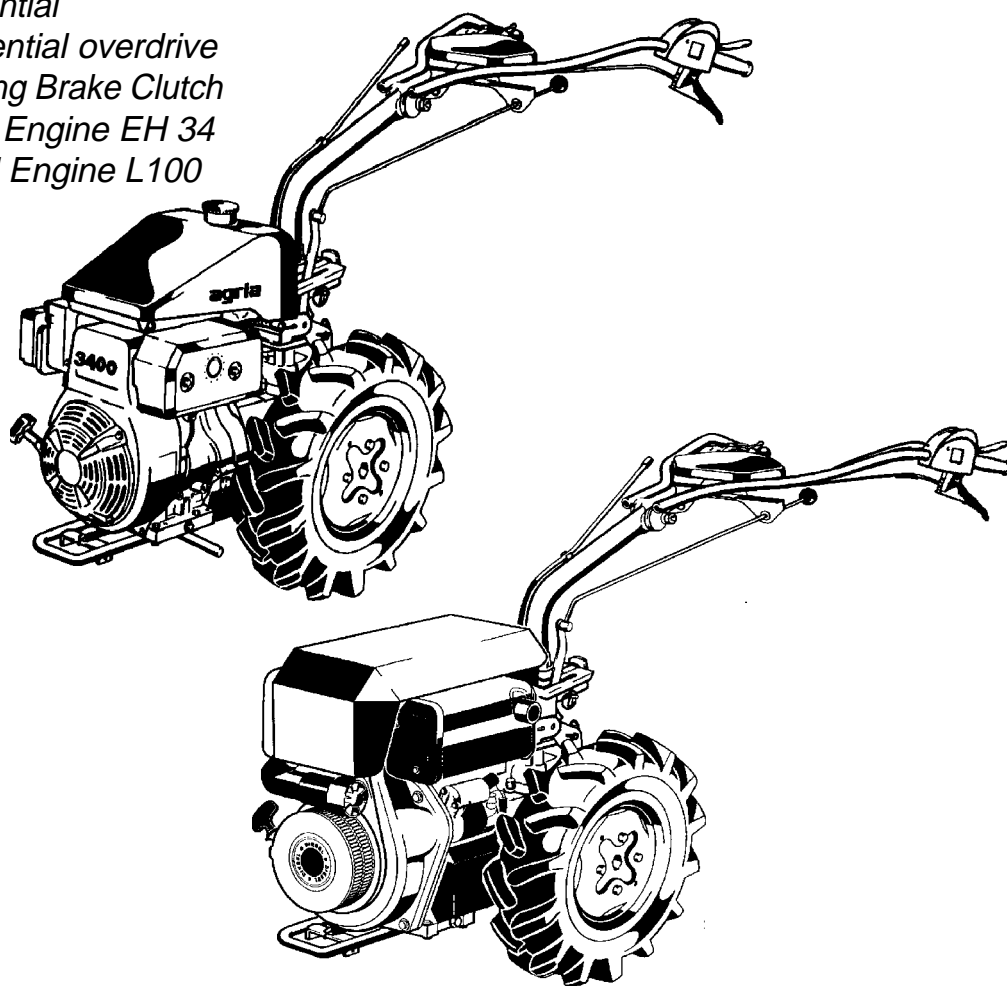
Operating Instructions **agria**

Translation of the original operating instructions

Two-Wheel Tractor 3400, 3400KL

Versions with:

- Differential
- Differential overdrive
- Steering Brake Clutch
- Petrol Engine EH 34
- Diesel Engine L100



3247/4291_1



Before commissioning the machine, read operating instructions and observe warnings and safety instructions.



Please complete:

Machine Type No.:
Identification No.:
.....
Engine Type:
Engine No.:
Date of Purchase:

For name plate, refer to

p3/fig. A/17,
p7/fig. C/17,
p11/fig. E/17,
p15/fig. G/17.

For engine type and number, refer to

p86/fig. J/17,
p90/fig. K/17.

Please state these data when ordering spare parts to avoid wrong deliveries.

Only use original agria spare parts!

Specifications, figures and dimensions stated in these instructions are not binding. No claims can be derived from them. We reserve the right for improvements without changing these instructions.

This delivery comprises:

- Operating instructions (machine + engine)
- Two-wheel tractor
- Tool kit
- Assembly hook ring for shifters

→agria - Service←

= contact your agria-workshop

Symbols

- | | | | |
|--|------------------------|--|------------------|
| | Warning – Danger | | |
| | Caution | | |
| | Important information | | |
| | Fuel | | Fuel filter |
| | Choke | | Air filter |
| | Speed control | | |
| | Engine Start | | Engine Stop |
| | Clutch | | |
| | Forward | | Reverse |
| | Fast | | Slow |
| | PTO | | |
| | Differential lock | | |
| | Brake | | Hand brake |
| | Open | | Closed |
| | Engine Oil | | Engine oil level |
| | Transmission Oil | | |
| | Transmission oil level | | |
| | Oiling | | Greasing point |
| | Lifting point | | Visual check |
| | Wear protective gloves | | |
| | Wear safety shoes | | |

Figure A

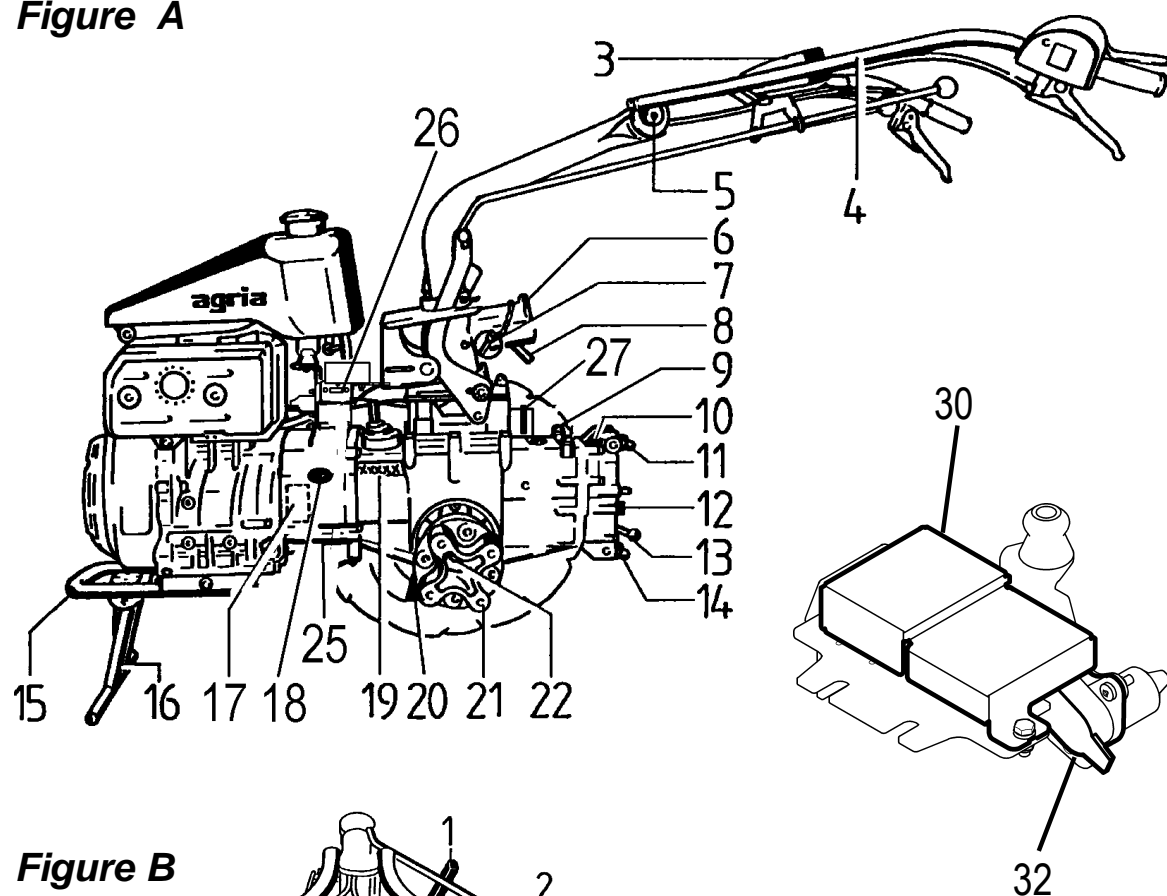
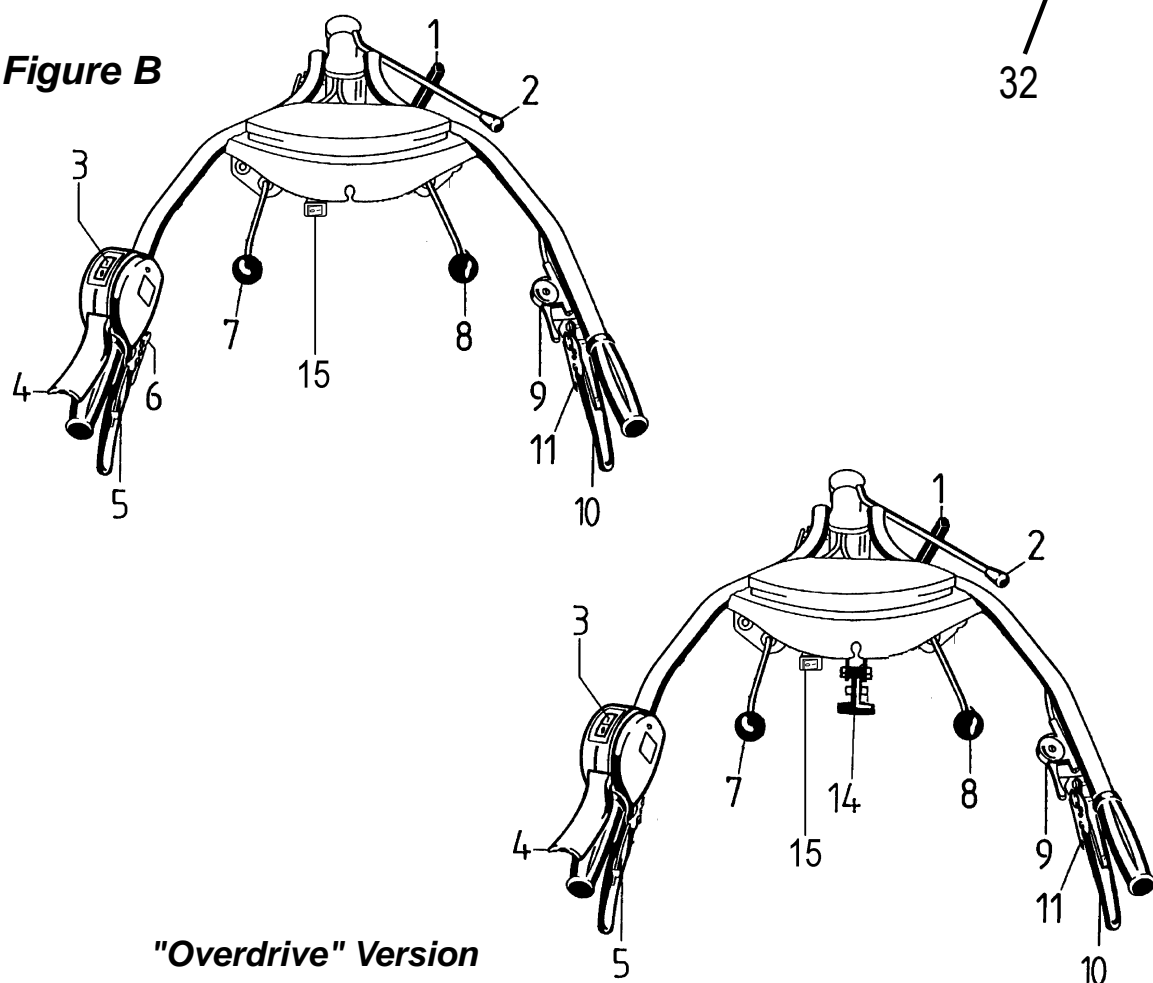


Figure B



"Overdrive" Version

Figure A

- 3 Tool kit
- 4 Handlebar
- 5 Clamping lever for height adjustment of steering handle
- 6 Hitch (floating drawbar)
- 7 Linch pin
- 8 Plug
- 9 Attachment bolts for wings and floating axle stop
- 10 Transmission oil filling opening and oil dip-stick
- 11 Eye bolt with cap nut, top
- 12 PTO
- 13 Link, PTO engagement
- 14 Eye bolt with cap nut, bottom
- 15 Weight mounting device and engine protection base
- 16 Stand
- 17 Name plate (on the right, in travel direction)
- 18 Oil dip-stick/oil control plug, oil filling opening, clutch case
- 19 Machine identification no. (on right side, hammered into housing)
- 20 Oil drain plug, gearbox
- 21 Hub adapter
- 22 Attachment bolt
- 25 Oil drain plug, clutch case
- 26 Operating hour counter
- 27 Disc brake
- 30 Fuse, relay (under the cover)
- 32 Socket (Accessory 3479 911)

Figure B:

- 1 PTO engagement lever
- 2 Bar locking lever
- 3 Push switch for safety circuit
- 4 Safety circuit lever
- 5 Clutch hand lever with safety hillholder and hand brake
(safety hillholder and hand brake but not on the "Overdrive" version)
- 6 Pawl for hand brake (but not on the "Overdrive" version)
- 7 Forward/Reverse ball handle
(with steering handle swivelled (front attachment) = Gear-shift ball handle)
- 8 Gear-shift ball handle
(with steering handle swivelled (front attachment) = Forward/Reverse ball handle)
- 9 Speed control lever
- 10 Differential lock lever
- 11 Differential lock pawl
- 14 Brake lever for central hand brake (on "Overdrive" version only)
- 15 Engine Shut-off Switch

Amount of Delivery 2

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**Figs. G + H, Diesel Engine /
Steering Brake Clutch Version 15**

Fig. J, Diesel Engine 86

Fig. K, Petrol Engine 90

1

2

3

4

5

6

Lubricants and Anti-Corrosive Agents

Use the specified lubricants for engine and gearbox (see “Specifications”).

*We recommend using **bio-lubricating oil** or **bio-lubricating grease** for “open” lubricating points or nipples (as specified in the operating instructions).*

We recommend using bio-slushing oil for preservation of machines and implements (do not apply on painted external covers). Oil can be brushed or sprayed on.

Anti-corrosive agents are environmentally friendly and degrade fast.

Using ecologically safe bio-lubricants and bio-anti-corrosives, you contribute to environmental protection and to the wellbeing of humans, animals and plants.

Maintenance and Repair

The trained mechanics of your agria workshop carry out expert maintenance and repair.

You should only carry out major maintenance work and repairs on your own, if you have the proper tools and knowledge of machines and internal combustion engines.

Do not hammer against the flywheel with a hard object or metal tools as it might crack and shatter in operation causing injuries and damage. Only use suitable tools for pulling the flywheel.

Figure C

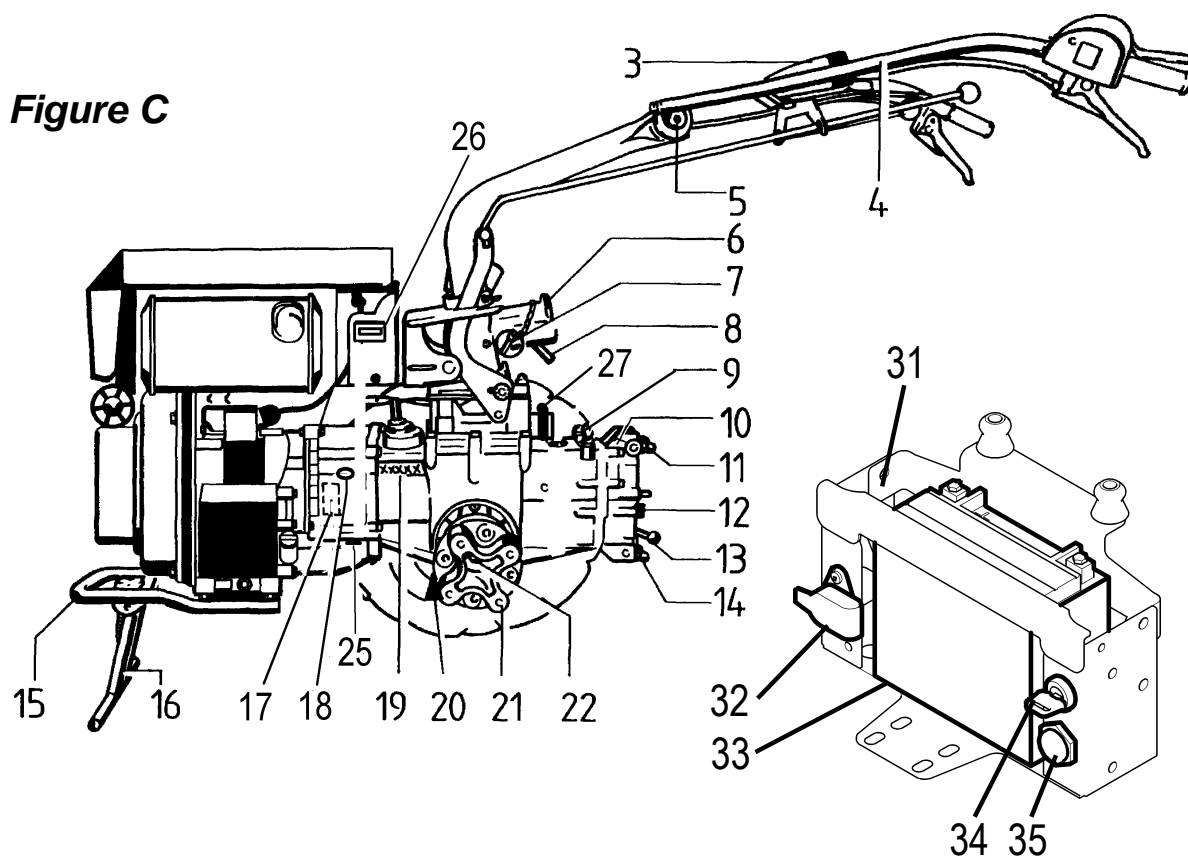
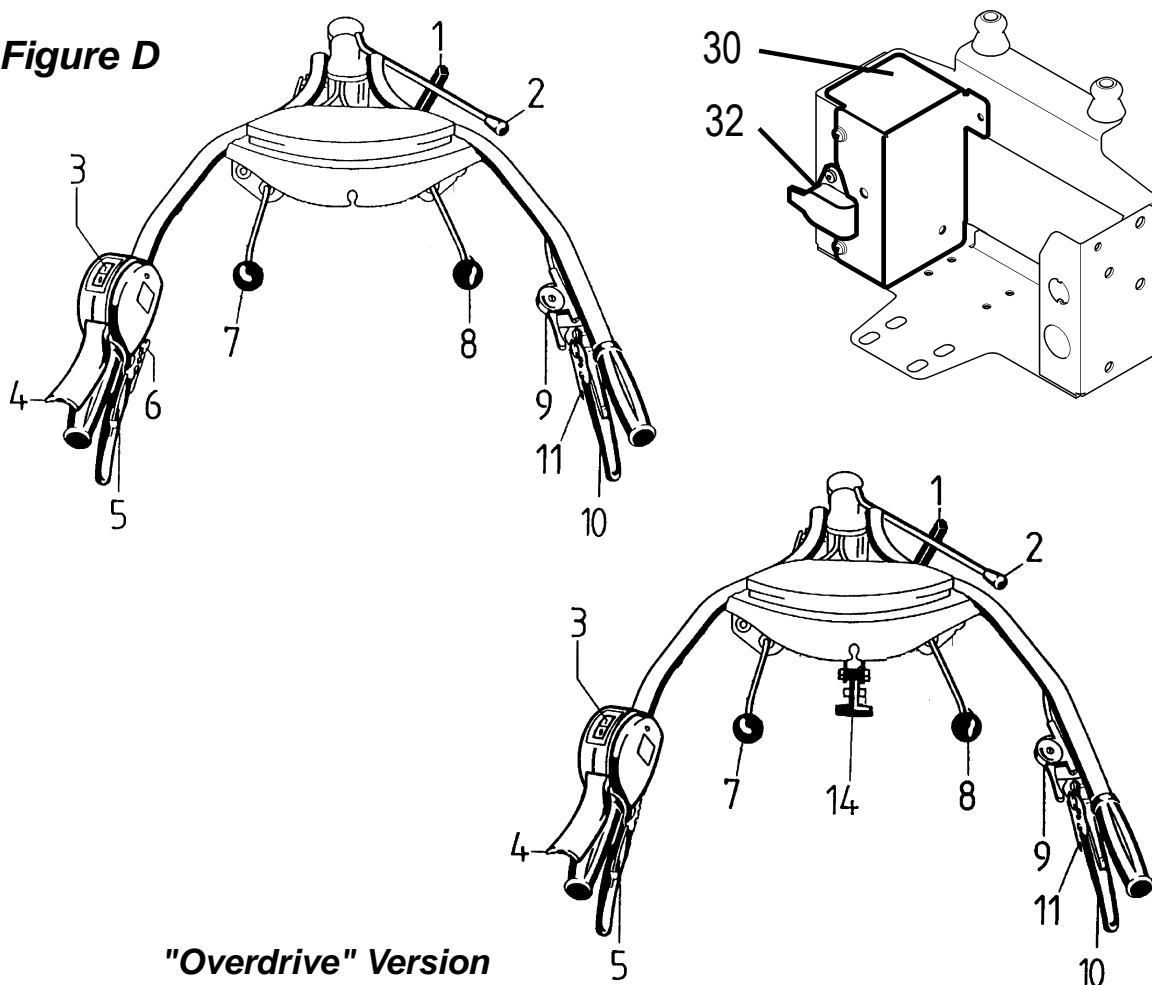


Figure D



"Overdrive" Version

Figure C:

- 3 Tool kit
- 4 Handlebar
- 5 Clamping lever for height adjustment of steering handle
- 6 Hitch (floating drawbar)
- 7 Linch pin
- 8 Plug
- 9 Attachment bolts for wings and floating axle stop
- 10 Transmission oil filling opening and oil dip-stick
- 11 Eye bolt with cap nut, top
- 12 PTO
- 13 Link, PTO engagement
- 14 Eye bolt with cap nut, bottom
- 15 Weight mounting device and engine protection base
- 16 Stand
- 17 Name plate (on the right, in travel direction)
- 18 Oil dip-stick/oil control plug, oil filling opening, clutch case
- 19 Machine identification no. (on right side, hammered into housing)
- 20 Oil drain plug, gearbox
- 21 Hub adapter
- 22 Attachment bolt for hub adapters
- 25 Oil drain plug, clutch case
- 26 Operating hour counter
- 27 Disc brake
- 30 Relay (E-Start version)
- 31 Fuse, relay under the cover (Recoil starter version)
- 32 Socket
- 33 Battery (on E-Start version only)
- 34 Start switch (on E-Start version only)
- 35 Battery charge control beeper (on E-Start version only)

Figure D:

- 1 PTO engagement lever
- 2 Bar locking lever
- 3 Push switch for safety circuit
- 4 Safety circuit lever
- 5 Clutch hand lever with safety hillholder and hand brake
(safety hillholder and hand brake but not on the "Overdrive" version)
- 6 Pawl for hand brake (but not on the "Overdrive" version)
- 7 Forward/Reverse ball handle
(with steering handle swivelled (front attachment) = Gear-shift ball handle)
- 8 Gear-shift ball handle
(with steering handle swivelled (front attachment) = Forward/Reverse ball handle)
- 9 Speed control lever
- 10 Differential lock lever
- 11 Differential lock pawl
- 14 Brake lever for central hand brake (on "Overdrive" version only)

Petrol Engine Robin EH 34 D

*This engine runs perfectly using commercially available **lead-free Normal and Super petrol (also E10)** as well as **Super plus**.*

Do not add oil to petrol.

If, for environmental reasons, you use unleaded petrol, make sure the fuel is drained completely when shutting down the engine for more than 30 days. This is to prevent resin residue from depositing in the carburetor, fuel filter, and tank. Or add a fuel stabilizer.

For further instructions refer to “Engine Preservation”.

Diesel Engine Yanmar L100 AE

This diesel engine runs on conventional diesel fuel of a min. cetane rating of 45.

Do not use diesel fuel oil substitutes, they may be harmful to the fuel system. Fuel should be free of water or dust.

Winter operation:

To ensure reliable winter operation use “winter diesel fuel”, to be purchased at filling stations.

At outside temperatures of below -15°C, take the following additional precautions:

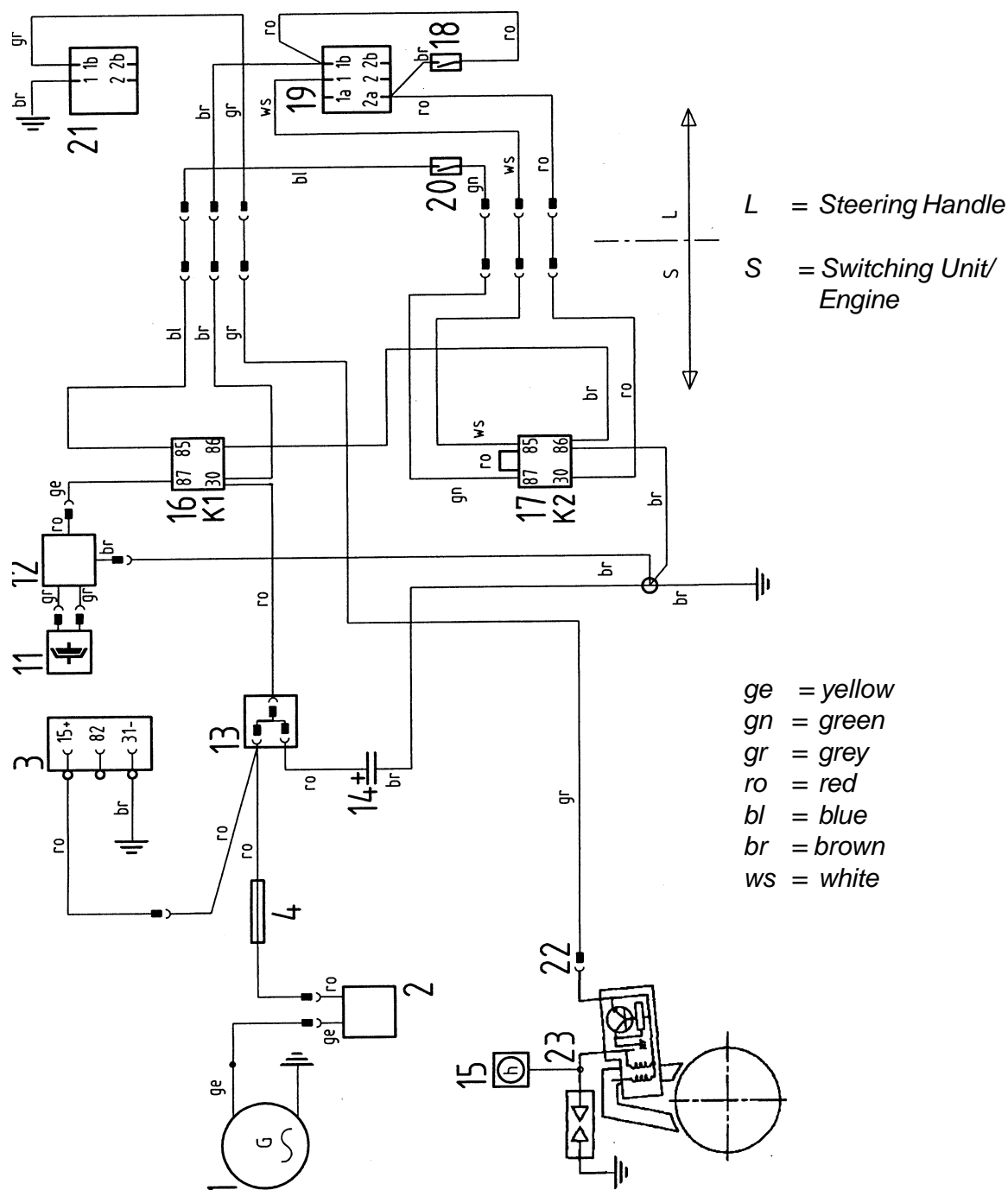
*add commercial flow conditioners
or*

add paraffine oil to depress diesel pour-point:

Paraffine oil:	winter diesel fuel	summer diesel fuel
	<i>pour-point</i>	
50%	app. -31°C	app. -25°C
30%	app. -26°C	app. -15°C
10%	app. -20°C	app. - 9°C

As a last resort, you can add up to 30% of regular petrol to avoid paraffine deposits. However, this has negative effects on consumption rate and performance.

- | | |
|--------------------------------------|-------------------------------------|
| 1 Generator 12 V | 15 Operating hour counter |
| 2 Regulator | 16 Relay |
| 3 Socket (optional Article 3479 911) | 17 Relay |
| 4 10 A flat plug fuse | 18 Switch, open (dead man's handle) |
| 11 Solenoid clutch | 19 Press switch |
| 12 Soft start module | 20 Switch, closed (clutch lever) |
| 13 Distributor | 21 Engine Shut-off Switch |
| 14 Electrolytic capacitor | 22 Engine connection stop |
| | 23 Ignition cable |



Designation of Parts:

Petrol Engine / Steering Brake Clutch Version

agria

Figure E

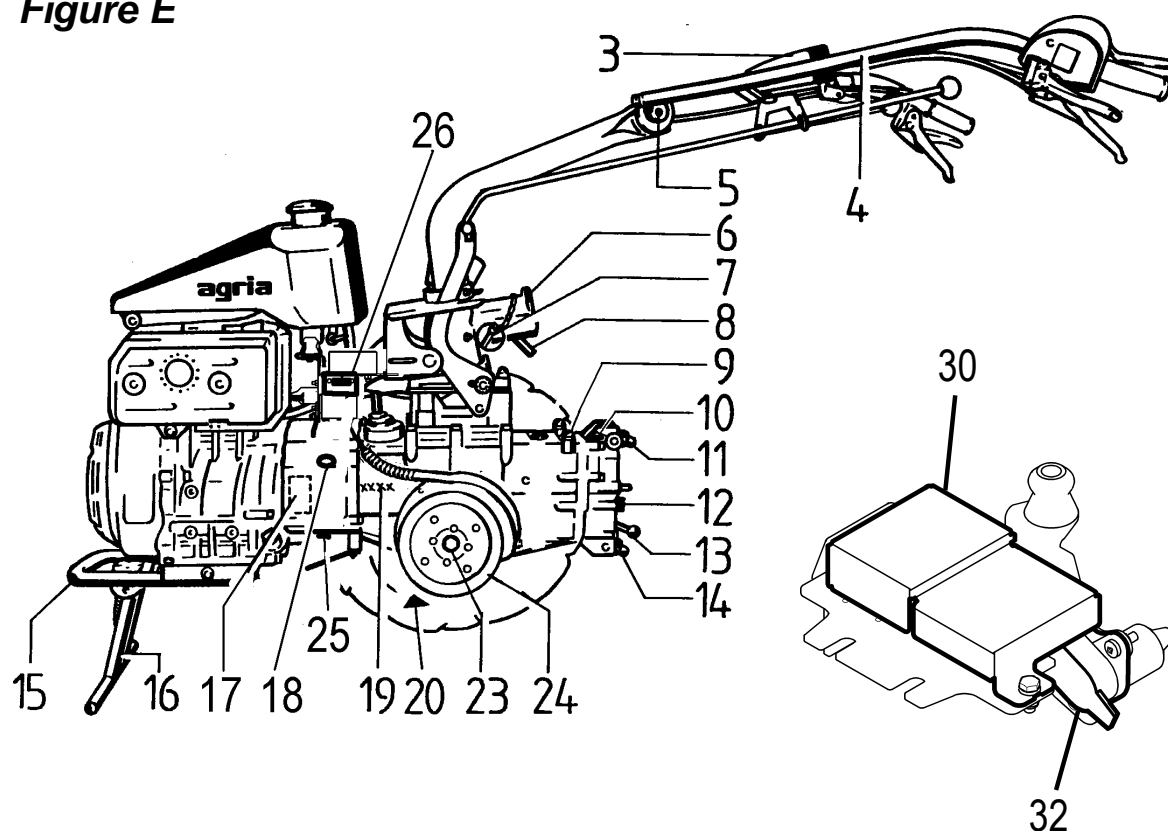
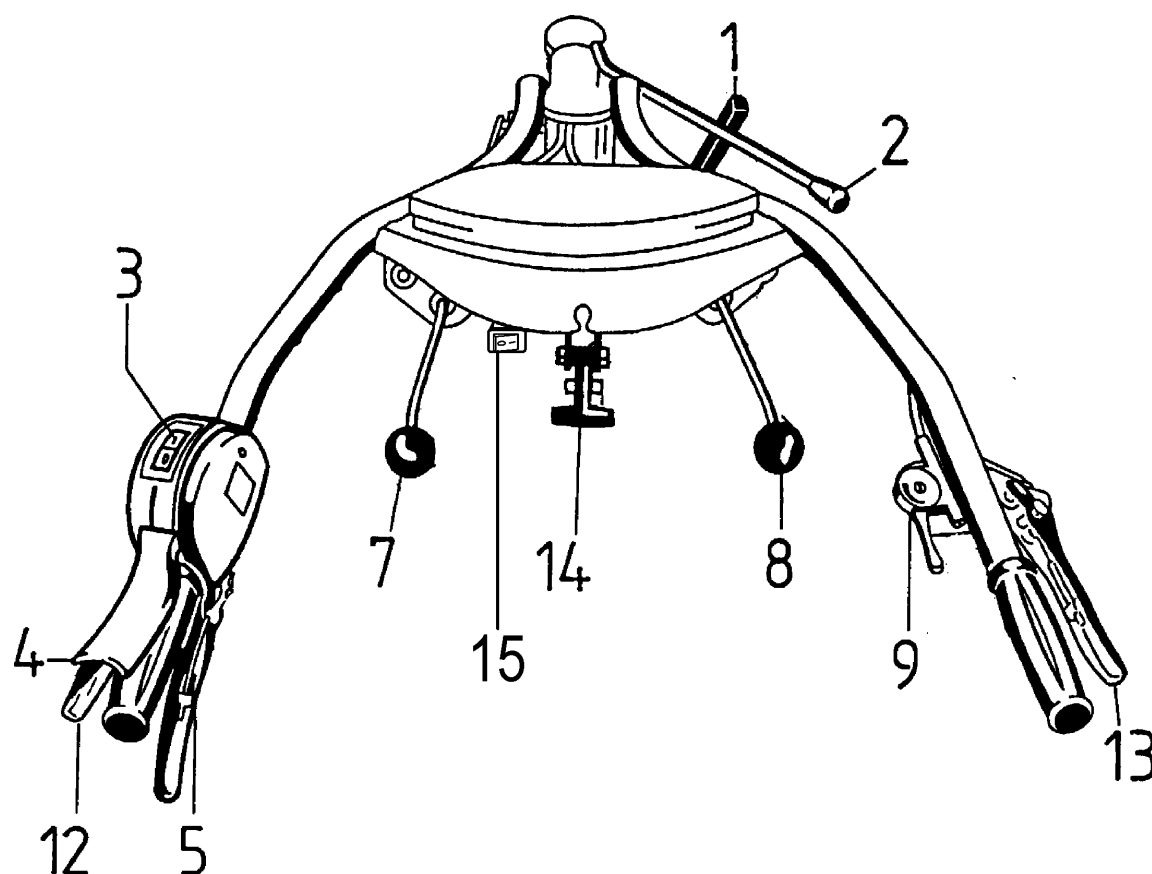


Figure F



Designation of Parts:

Petrol Engine / Steering Brake Clutch Version

agria

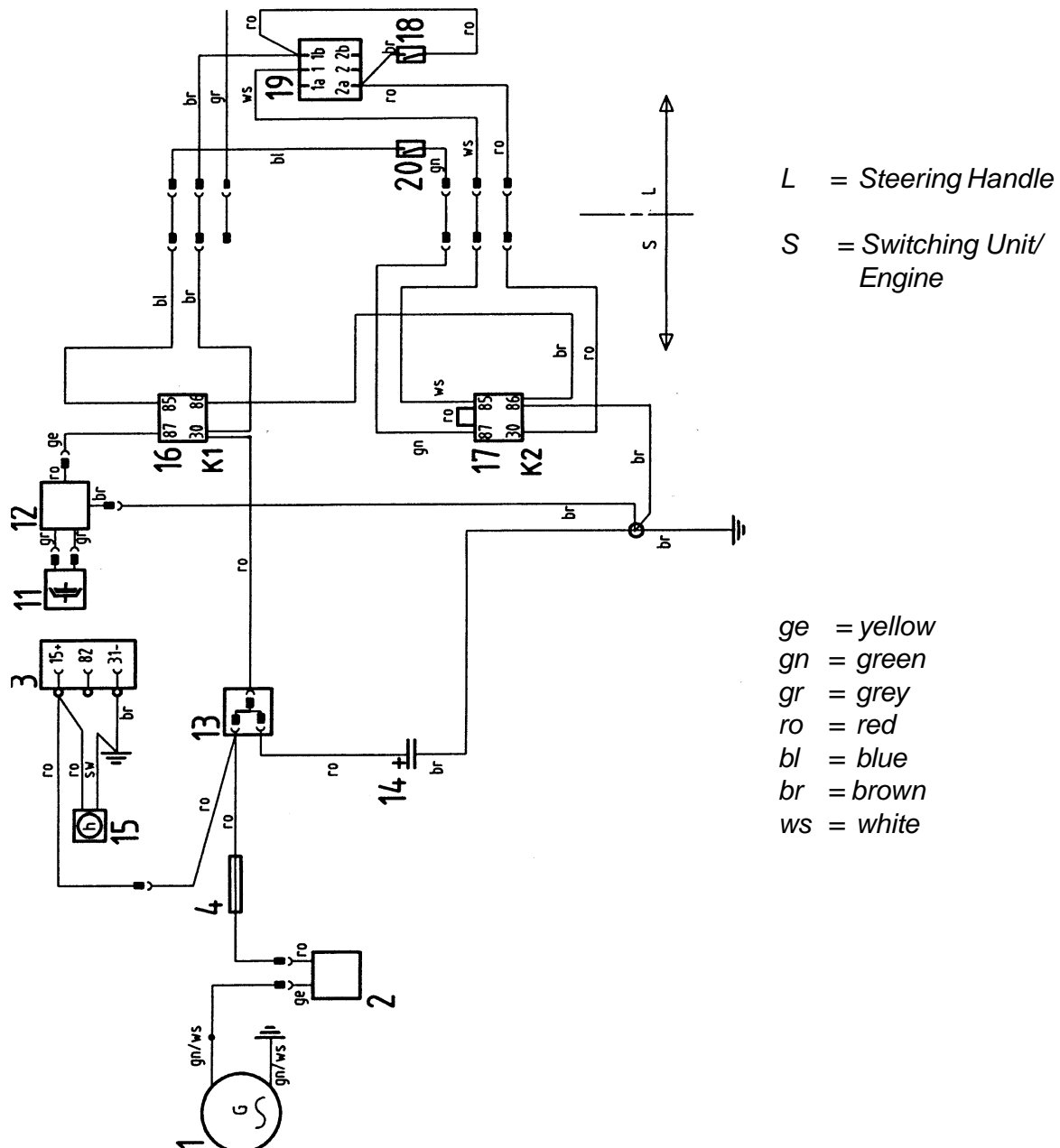
Figure E

- 3 Tool kit
- 4 Handlebar
- 5 Clamping lever for height adjustment of steering handle
- 6 Hitch (floating drawbar)
- 7 Linch pin
- 8 Plug
- 9 Attachment bolts for wings and floating axle stop
- 10 Transmission oil filling opening and oil dip-stick
- 11 Eye bolt with cap nut, top
- 12 PTO
- 13 Link, PTO engagement
- 14 Eye bolt with cap nut, bottom
- 15 Weight mounting device and engine protection base
- 16 Stand
- 17 Name plate (on the right, in travel direction)
- 18 Oil dip-stick/oil controll plug, oil filling opening, clutch case
- 19 Machine identification no. (on right side, hammered into housing)
- 20 Oil drain plug, gearbox
- 23 Hex nut on hub
- 24 Steering brake clutch
- 25 Oil drain plug, clutch case
- 26 Operating hour counter
- 30 Fuse, relay (under the cover)
- 32 Socket (Accessory 3479 911)

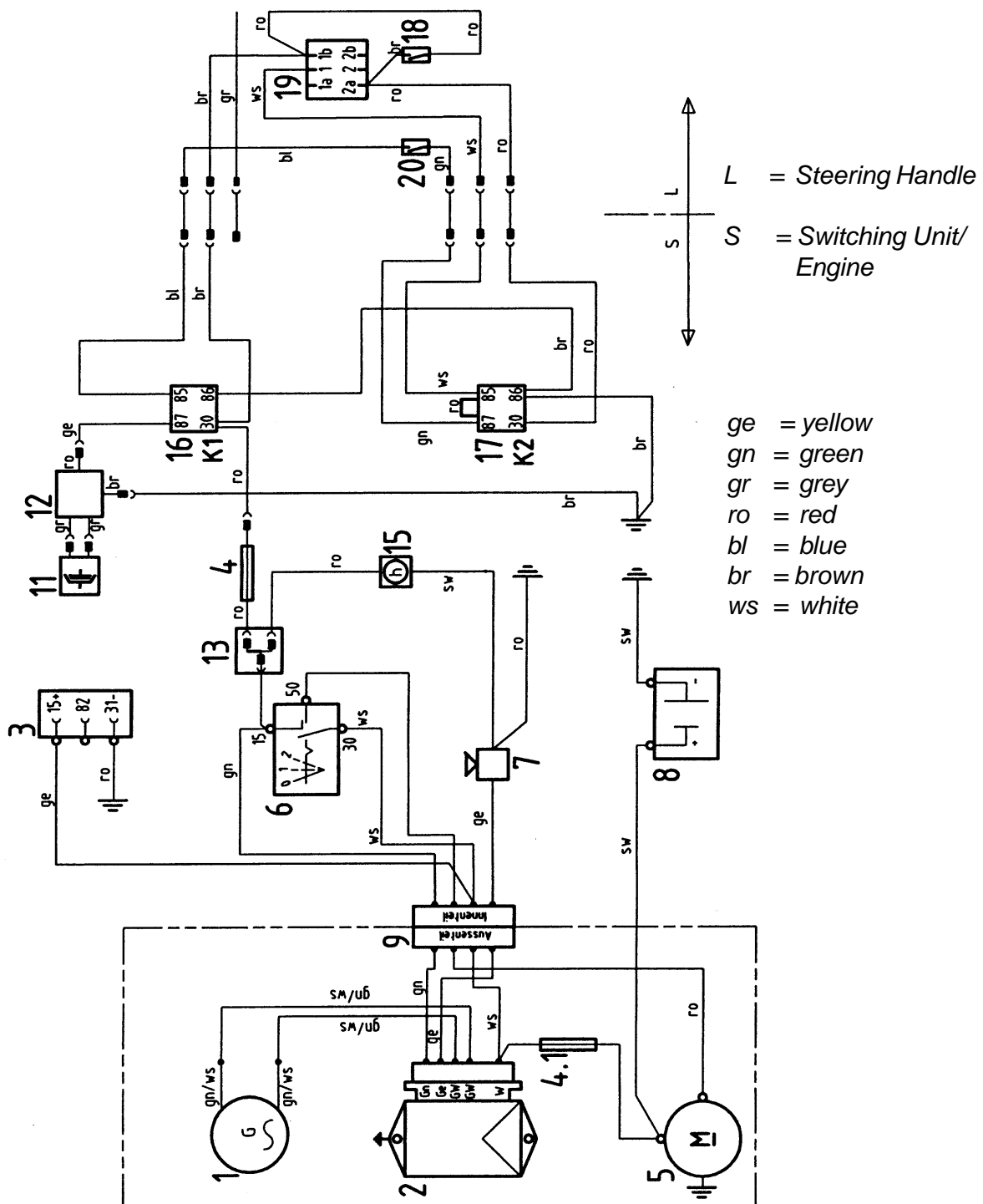
Figure F:

- 1 PTO engagement lever
- 2 Spar locking lever
- 3 Press switch for safety circuit
- 4 Safety circuit lever
- 5 Clutch hand lever
- 7 Forward/Reverse ball handle
(with steering handle swivelled (front attachment) = Gear-shift ball handle)
- 8 Gear-shift ball handle
(with steering handle swivelled (front attachment) = Forward/Reverse ball handle)
- 9 Speed control lever
- 2 Steering brake clutch lever, left
- 13 Steering brake clutch lever, right
- 14 Central hand brake lever
- 15 Engine Shut-off Switch

- 1 Generator 12 V
- 2 Regulator
- 3 Socket
- 4 10 A flat plug fuse
- 11 Solenoid clutch
- 12 Soft start module
- 13 Distributor
- 14 Electrolytic capacitor
- 15 Operating hour counter
- 16 Relay
- 17 Relay
- 18 Switch, open (dead man's handle)
- 19 Press switch
- 20 Switch, closed (clutch lever)



- | | |
|--------------------------------------|-------------------------------------|
| 1 Generator 12 V | 8 Battery |
| 2 Regulator | 9 Central connector for regulator |
| 3 Socket (optional Article 3479 911) | 11 Solenoid clutch |
| 4 10 A Flat plug fuse | 12 Soft start module |
| 4.1 20 A glass tube fuse | 13 Distributor |
| 5 E-Starter | 15 Operating hour counter |
| 6 Start switch | 16 Relay |
| 7 Beeper | 17 Relay |
| | 18 Switch, open (dead man's handle) |
| | 19 Push switch |
| | 20 Switch, closed (clutch lever) |



Designation of Parts:

Diesel Engine / Steering Brake Clutch Version

agria

Fig. G

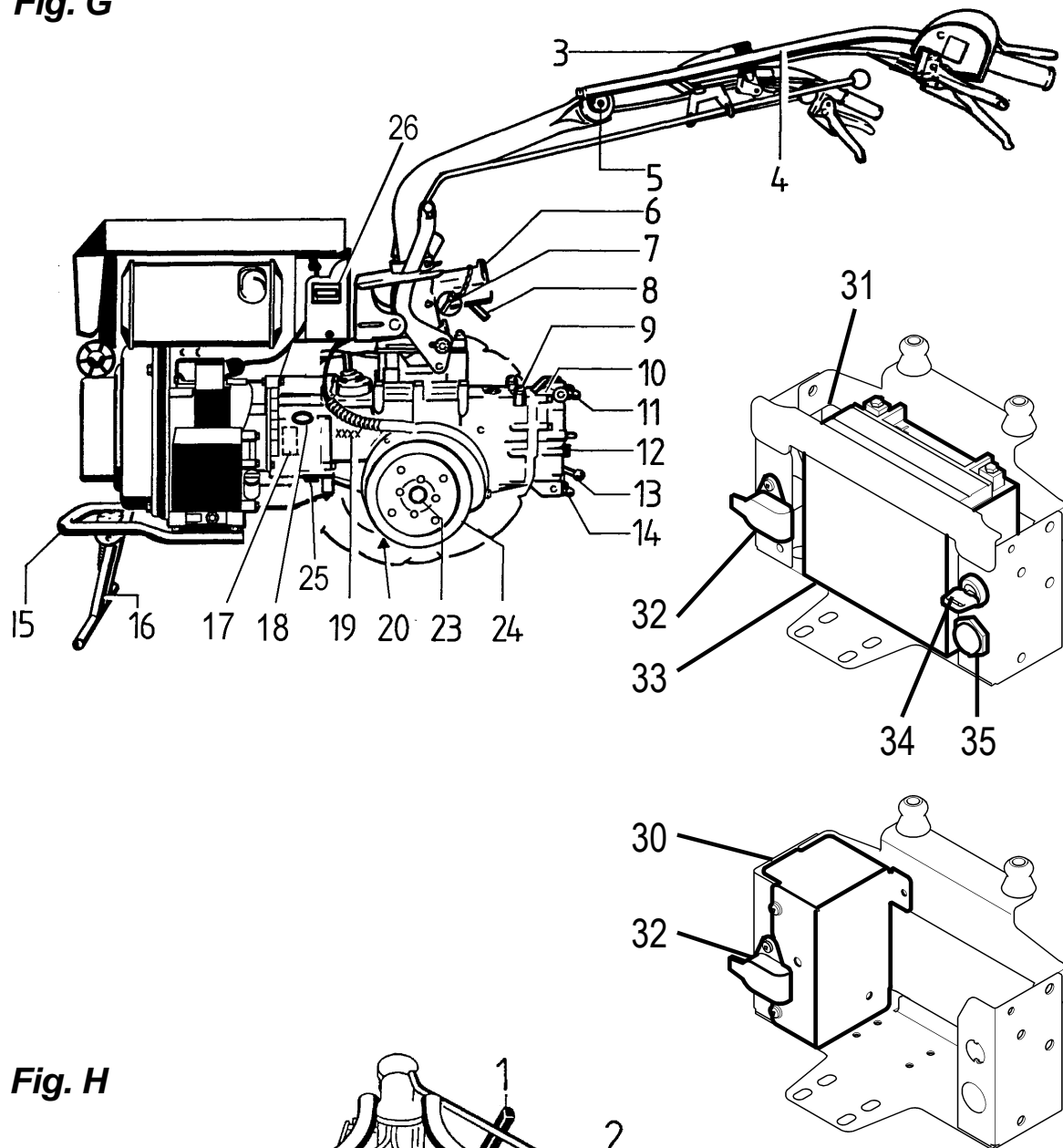
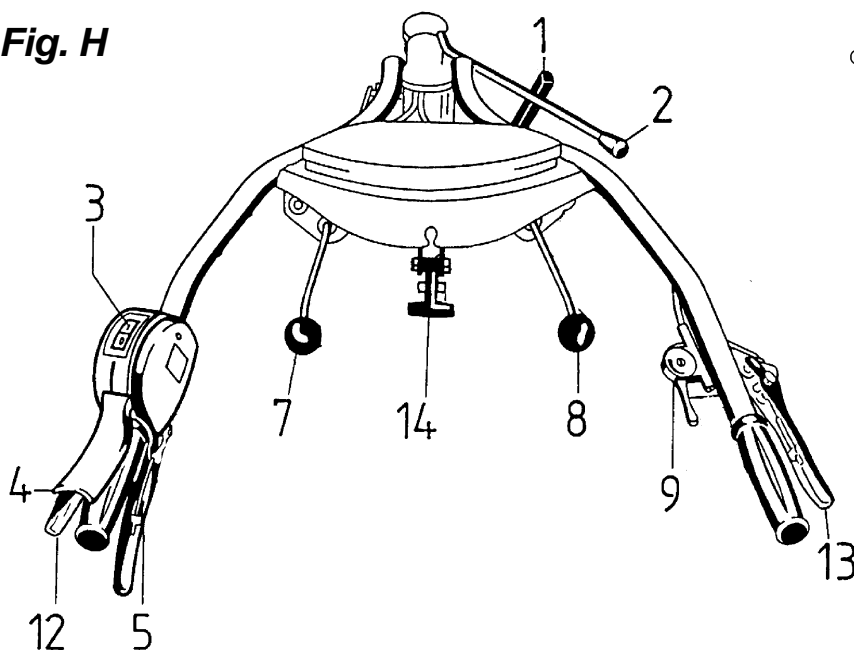


Fig. H



Designation of Parts:

Diesel Engine / Steering Brake Clutch Version

agria

Fig. G:

- 3 Tool kit
- 4 Handlebar
- 5 Clamping lever for height adjustment of steering handle
- 6 Hitch (floating drawbar)
- 7 Linch pin
- 8 Plug
- 9 Transmission oil filling opening and oil dip-stick
- 10 Attachment bolts for wings and floating axle stop
- 11 Eye bolt with cap nut, top
- 12 PTO
- 13 Link, PTO engagement
- 14 Eye bolt with cap nut, bottom
- 15 Weight mounting device and engine protection base
- 16 Stand
- 17 Name plate (on the right, in travel direction)
- 18 Oil dip-stick/oil controll plug, oil filling opening, clutch case
- 19 Machine identification no. (on right side, hammered into housing)
- 20 Oil drain plug, gearbox
- 23 Hex nut on hub
- 24 Steering brake clutch
- 25 Oil drain plug, clutch case
- 26 Operating hour counter
- 30 Relay (E-Start version)
- 31 Fuse, relay under the cover (Recoil starter version)
- 32 Socket
- 33 Battery (on E-Start version only)
- 34 Start switch (on E-Start version only))
- 35 Battery charge control beeper (on E-Start version only)

Fig. H:

- 1 PTO engagement lever
- 2 Spar locking lever
- 3 Push switch for safety circuit
- 4 Safety circuit lever
- 5 Clutch hand lever
- 7 Forward/Reverse ball handle
(with steering handle swivelled (front attachment) = Gear-shift ball handle)
- 8 Gear-shift ball handle
(with steering handle swivelled (front attachment) = Forward/Reverse ball handle)
- 9 Speed control lever
- 2 Steering brake clutch lever, left
- 13 Steering brake clutch lever, right
- 14 Central hand brake lever

Before starting the engine, read the operating instructions and note:

Warning



This symbol marks all paragraphs in these operating instructions which affect your safety. Pass all safety instructions to other users and operators.

Due Use

The two-wheel tractor is a hand-controlled automatic single-axle machine which can power and/or pull various implements approved by the manufacturer. Areas of application are for such as turning over the ground, mowing grass and meadowland, snow clearance and sweeping (due use).

Any other type of operation is considered undue. The manufacturer is not liable for any damages resulting from undue use, for which the risk lies with the user alone.

When the single-axle tractor/the tool carrier/the all-purpose machine is used on public roads, the local national road traffic rules must be observed, e.g. reflectors, lights.

Due use includes compliance with manufacturer's instructions on operation, maintenance and repair.

Any unauthorized changes to the two-wheel tractor render manufacturer liability null and void.

General Instructions on Safety and Accident Prevention

1

Basic Rule:

The standard accident prevention regulations must be adhered to, as well as all other generally accepted rules governing operational safety, occupational health and road traffic regulations.

For drives on public roads, the current traffic code applies.

Accordingly, check the two-wheel tractor for road and operational safety each time you take up operation.

Only persons familiar with the tractor and instructed on the hazards of operation are allowed to use, maintain and repair the tractor.

Teenagers of 16 years or younger may not operate the two-wheel tractor!

Only work in good light and visibility.

Operator's clothes should fit tight. Avoid wearing loose fitting clothes. Wear safety shoes.

Note the warning and instruction signs on the tractor for safe operation. Compliance is for your own safety.

When transporting the tractor on vehicles or trailers outside the area to be cultivated, ensure that the engine is shut off.

Careful with rotating tools – keep at a safe distance!

1

Beware of coasting tools. Before you start any maintenance or repair on them, wait until tools have come to a complete stop.

Foreign powered parts shear and crush! Riding on the attachment during operation is not permitted.

Implements and their weight affect the driving, steering, braking, and tip-over characteristics of the tractor. Therefore, ensure steering and braking functions are sufficient. Match operating speed to conditions.

Do not change settings of governor. High engine speed increases risk of accidents.

Working Area and Danger Zone

The user is liable to third parties working within the tractor's working range.

Staying in the danger zone is not permitted.

Check the immediate surroundings of the tractor before you start it. Watch out for children and animals.

Before you start work, clear the area from any foreign object. During operation, always watch out for further objects and remove them in time.

For operation in enclosed areas, ensure that a safety distance is kept to enclosures to prevent damage to tools.

Operation and Safety Devices

Before you start the engine

Become familiar with the devices and operating elements and their functions. Above all, learn how to turn the engine off quickly and safely in an emergency.

Ensure that all protective devices are mounted and positioned to provide protection.

With no implement mounted, make sure PTO-shaft is covered with the protective cap.

Starting the engine

Do not start engine in closed rooms. The carbon monoxide contained in the exhaust fume is extremely toxic when inhaled.

Before you start the engine set all operating elements to neutral or idling position.

For starting the engine, do not step in front of the two-wheel tractor and the implement.

Do not use assist-starting liquids when using electrical assist-starting devices (jumper cable). Danger of explosion.

Operation

Never leave the operator's position at the steering handle while tractor is at work.

Never adjust the operating handles during work – danger!

During operation do not leave the operator's position at the steering handle, especially not when you turn the machine.

Riding on the implement during operation or in transport is not permitted.

If clogging occurs in the implement, shut off the engine and clean the implement with an appropriate tool.

In case of damage to the two-wheel tractor or to the implement, immediately shut off the engine and have it repaired.

If steering causes problems, immediately bring the two-wheel tractor to a halt and turn it off. Have the malfunction removed without delay.

To prevent the tractor from sliding on slopes make sure it is secured by another person using a bar or a rope. This person must be located at a higher position than the vehicle at a safe distance from the attachment at work.

If possible, always work diagonally to the slope.

End of Operation

Never leave the two-wheel tractor unattended with the engine running.

Before you leave the two-wheel tractor, shut off the engine. Then close fuel taps.

Secure two-wheel tractor against unauthorized use. If tractor is equipped with ignition key, remove the key. For all other versions, remove spark plug connector.

Implements

Only mount implements with the engine and PTO shut off.

Always use appropriate tools and wear gloves when changing implements and parts thereof.

For mounting and dismounting implements bring stand into proper position and ensure stability.

Secure two-wheel tractor and implements against rolling off (parking brake, wheel chocks).

Beware of injuries while coupling implements.

Hitch implements as specified and only couple at specified points.

Secure two-wheel tractor and implement against unauthorized use and rolling off when you leave the machine. If necessary, install transport or security devices and secure.

Hoeing Attachment

1

When hoeing and tilling on difficult ground (stony, hard etc.) the machine may give sudden jerking movements in an upward and forward direction and therefore extra care should be taken under these conditions.

Adjust protective cover of hoeing attachment so that only those parts of tools which penetrate the soil are not covered. When hoeing, make sure depth bar is adjusted properly.

Mowing Implement

Handle with care! Sharp blades of the cutter bar may cause injuries! Remove knife guards only for mowing and refit immediately after work has finished.

For transport and storage always mount the knife guards. Secure finger bars additionally with tension springs.

Do not transport the dismantled cutter bar without knife guards.

When mounting and dismantling the cutter bar, make sure all blades are protected by the knife guards.

To exchange the knife and to mount/dismount the knife driver, make sure that you turn screws away from cutting blades.

For grinding the mowing knives, always wear safety goggles and gloves.

Trailer

Make sure to not exceed permissible tongue load of trailer hitch, floating drawbar or hitch.

When coupling the drawbar, make sure manoeuvrability at coupling point is sufficient.

Do not exceed gross axle weight rating, towing capacity and gross weights.

Before driving, check brake function and rear lighting for proper operation.

Regularly check brake systems closely.

Have adjustments and repairs on the brake system carried out by a professional workshop or an authorized brake service station only.

When driving with mounted trailer, do not use single-wheel braking.

On tractors equipped with single-wheel transmission do not engage single-wheel transmission. Single-wheel transmission must be locked!

For tractors equipped with differential lock; do not use differential lock when driving in curves.

Only one passenger may ride on the trailer, provided a safe passenger seat is available.

No additional passengers may be carried.

When driving downhill, shift into lower gears in time. On slopes never de-clutch to change gears.

Weights

Fit weights properly and at specified points.

Maintenance

Never carry out any maintenance or cleaning with the engine running.

Before you work on the engine, always remove spark plug connector (petrol engine only).

Check regularly and, if necessary, replace all protecting devices and tools subject to wear and tear.

Replace damaged cutting tools.

Always wear safety gloves and use proper tools when exchanging cutting tools.

Do not carry out repairs like welding, grinding, drilling, etc. on structural and safety-relevant parts (e.g. steering handle, hitch etc.)!

Keep two-wheel tractor and implement clean to avoid risk of fire.

Check nuts and bolts regularly for tight fit and re-tighten, if necessary.

Ensure that you re-install all safety and protective devices and adjust them properly after maintenance and cleaning.

Only use original agria spare parts. All other commercial spare parts must correspond to quality and technical requirements specified by agria.

Storage

It is not allowed to store the two-wheel tractor in rooms with open heating.

Never park the two-wheel tractor in closed rooms with fuel left in tank. Fuel vapours are hazardous.

Engine, Fuel, and Oil

Never let the engine run in closed rooms. Extreme danger of intoxication! For the same reason, also replace damaged exhaust parts immediately.

Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.

Be careful when dealing with fuel. Great danger of fire! Never refill fuel close to open fire, inflammable sparks or hot engine parts. Do not refill fuel in closed rooms. Do not smoke when refilling!

Refill only with the engine shut off and cooled down.

Do not spill any fuel, use a proper filling device (e.g. funnel).

In case of fuel-spillage, pull the two-wheel tractor away from the spillage before you start the engine.

Make sure fuel is of specified quality.

Store fuel in approved cans only.

1

Liquids leaking under high pressure, e.g. fuel, can penetrate the skin and cause severe injuries. Immediately see a doctor.

For safety reasons the petrol tank and fuel cap should be replaced regularly.

Store anti-corrosive agents and stabilizing liquids out of reach of children. If sickness and vomiting occur, see a doctor. If fuel has contacted eyes, rinse them thoroughly, avoid inhaling of vapours.

Read and observe enclosed instructions.

Before you dispose of opened and seemingly empty pressurised tins (e.g. of assist-starting liquids) make sure they are completely empty. Empty them in ventilated places safe from spark formation or flames. If necessary, dispose of tins in hazardous waste deposits.

Be careful when draining hot oil, danger of burns.

Make sure oil used is of specified quality. Storage is in approved cans only.

Dispose of oil, greases, and filters separately and properly.

Tyres and Tyre Air Pressure

When working on tyres, make sure two-wheel tractor is parked properly and secured against rolling off.

Any repairs are to be carried out by trained mechanics only and with the appropriate tools.

Regularly check tyre air pressure. Excessive pressure may cause bursts.

Use appropriate tyre air pressure for operation with implements.

Re-tighten attachment bolts of drive-wheels or check tightness when doing maintenance work.

Electrical System and Battery

When working on the electrical system, make sure the battery is disconnected (negative pole) (for tractors equipped with battery).

Make sure to connect battery properly – first connect positive pole and then negative pole. Disconnect in reverse order.

Be careful with battery gases – explosive!

Avoid spark discharge and open flames near batteries.

Remove plastic cover (if included) to recharge battery to prevent highly explosive gases from building up.

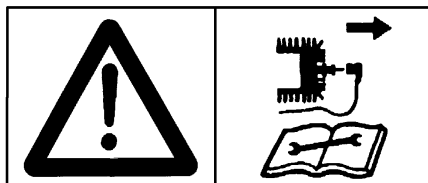
Careful when handling battery acid!

Only use specified circuit breakers. Strong circuit breakers will destroy the electrical system – danger of fire.

Always cover positive pole with specified cover or terminal cap.

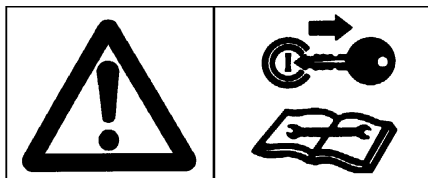
Persons having a pacemaker may not touch live parts of the ignition system when the engine is running.

Explanation of Warning Signs

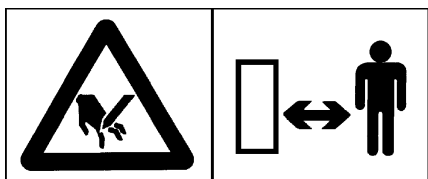


Before any cleaning, maintenance, and repair work shut off the engine and pull spark plug connector.

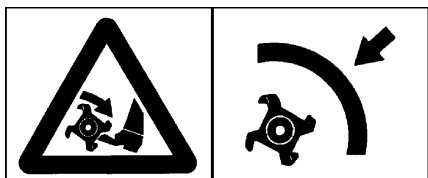
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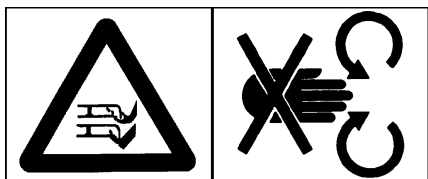
Before any cleaning, maintenance, and repair work shut off the engine and pull ignition key.



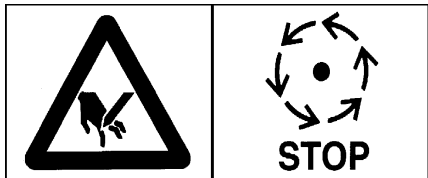
With engine running, keep at a safe distance from cutting or hoeing tools.



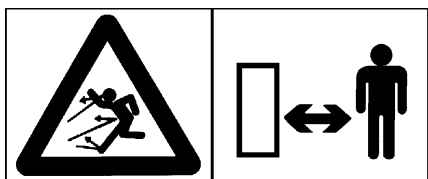
Do not work without protective covers mounted. Before starting the engine, bring covers in proper position.



With engine running, keep at a safe distance from cutting knife.



Do not touch moving machinery parts. Wait until they have come to a complete stop.



With engine running, keep at a safe distance from tractor.

Signs



When working with the machine, wear individual protective ear plugs.



Wear protective gloves.



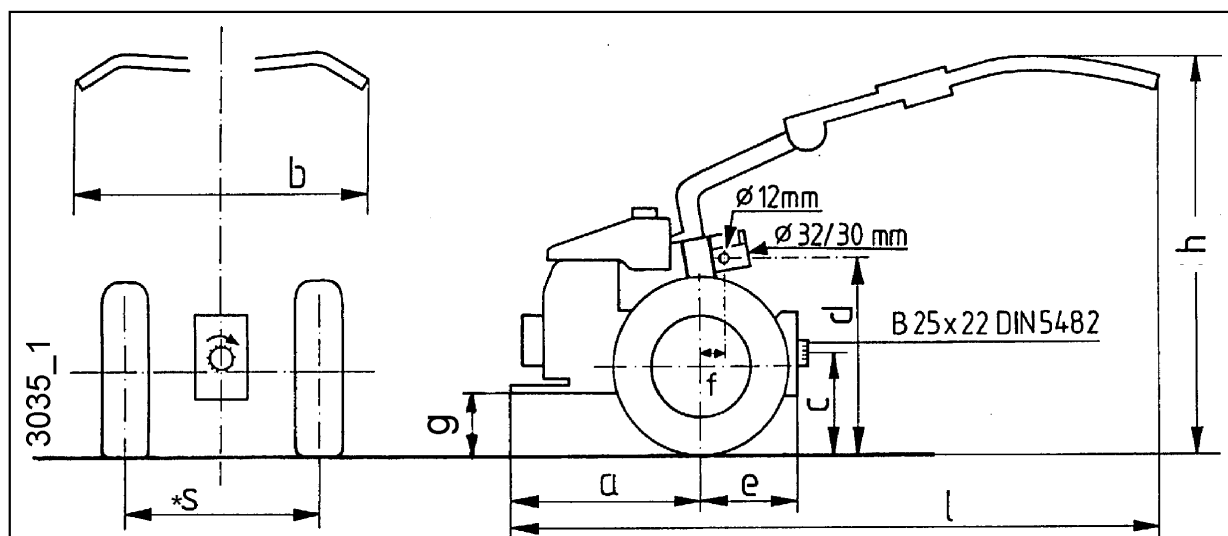
Wear safety shoes.

2. Specifications



Machine **agria**

Two-Wheel Tractor

Dimensions:



S = refer to track widths table

		(mm)								
		a	b	c	d	e	f	g	h	l
L100	4.00-8 AS	640	635	271	543	270	55	167	900-1200	1780
	5.00-10 AS	640	635	303	575	270	55	195	900-1200	1780
	20x8.00-10	640	635	303	575	270	55	195	900-1200	1780
	5.00-12 AS	640	635	323	595	270	55	215	900-1200	1780
	21x11.00-8	640	635	303	575	270	55	195	900-1200	1780
EH34D	4.00-8 AS	610	635	271	543	270	55	167	900-1200	1750
	5.00-10 AS	610	635	303	575	270	55	195	900-1200	1750
	20x8.00-10	610	635	303	575	270	55	195	900-1200	1750
	5.00-12 AS	610	635	323	595	270	55	215	900-1200	1750
	21x11.00-8	610	635	303	575	270	55	195	900-1200	1750

Tyre: (Accessory)

2490 041 4.00-8 Field tyre

0190 112 5.00 -10 Field tyre

3490 411 5.00-12 Field tyre

3490 511 20x 8.00- 10 Grass tyre

3490 611 21x11.00- 8 Terra Grip

For mounting drive-wheel and use
refer to p41-44.

Tyre air pressure at:

4.00-8; 5.00-10; 5.00-12 1.5 bar

21x11.00- 8; 20x8.00- 10 0.8 bar

3221 051 Pair of wheel weights 52 kg
for the steering brake clutch version
additional customised wheel bolts are
required parts kit 760 33

2. Specifications

Clutch: Solenoid oil-bath clutch

Gearbox: Mechanical gearbox,
4 forward and 4 reverse gears,
depending on version:


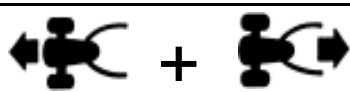
- lockable differential
with safety hillholder
- lockable differential, overdrive
with hand brake
- single-wheel steering brake clutch
with hand brake

Engine oil:

Drive gearbox: SAE 90 - API-GL5 2.0 l
..... (e.g. BP Energear Hypo)

Clutch housing: ATF 0.3 l
..... (e.g. Mobil ATF 220)

Travel Speeds [km/h]:

				
	1.	2.	3.	4.
4.00-8 AS	0,85	1,6	2,7	6,1 / 14,5*
5.00-10 AS	1,0	1,9	3,2	7,1 / 16,9*
5.00-12 AS	1,2	2,2	3,6	8,0 / 19,5*
20x8.00-10 R	1,0	1,9	3,2	7,1 / 16,9*
21x11.00-8 T	1,2	2,2	3,6	8,0 / 19,5*

For steering handle setting of "single-axle
cultivator" in reverse only gears 1 - 3

* 14.5 / 16.9 / 19.5 km/h =

for gearbox "Overdrive" version

PTO: 825 rpm
gear independent
at 3600 engine rpm
direction of rotation:
clockwise, looking on PTO,
constant in forward and reverse

Steering handle: height adjustable
side adjustable without tools,
swivels 180°
for mounting front implements

Vibration acceleration value:

on handlebar grip:

Petrol engine EH 34 D ... $a_{hw} < 2.5 \text{ m/s}^2$

Diesel engine L100AE ... $a_{hw} = 6.2 \text{ m/s}^2$

in accordance with EN 709 and EN 1033

For values with implements see page
84

Weights:

Empty weight: without drive-wheels 5.00-10 with

Differential versions:

Petrol engine

EH 34 D 103 kg 120.5 kg

Diesel engine L100AE

(Recoil starter) 122 kg 139.5 kg

Diesel engine L100AE

(Electric starter) 133 kg 150.5 kg

Steering brake clutch versions:

Petrol engine

EH 34 D 133 kg 150.5 kg

Diesel engine L100AE

(Recoil starter) 155 kg 172.5 kg

Diesel engine L100AE

(Electric starter) 165 kg 182.5 kg

Permissible total weight 250 kg

Permissible tongue load

on coupling point: 85 kg

Permissible towing capacity,

trailer with brake: 650 kg

Hitch:

SK14 Approval Sign  M3280

Generator alternating current

with petrol engine 12V 90W

with diesel engine 12V 90W

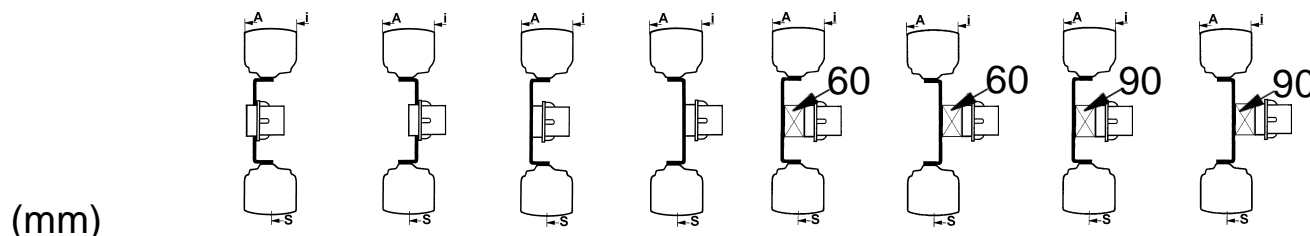


Wheel combination and Track Widths Table 3400 Diff.

2. Specifications

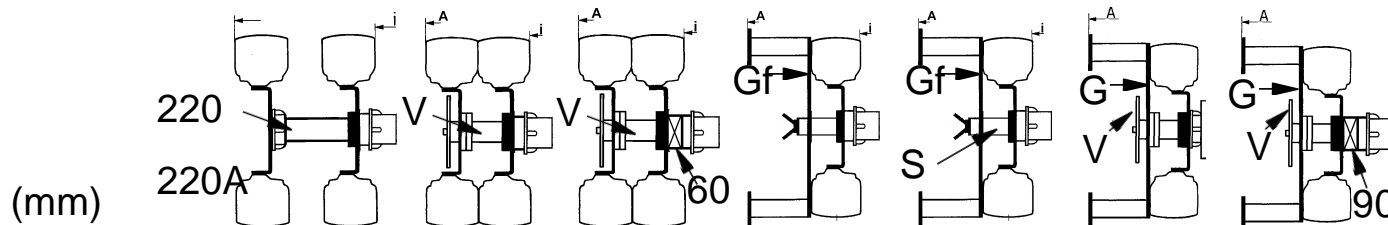
Differential Version

agria



(mm)

B														60			60			90			90		
		A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i
1	4.00-8 AS	460	360	260	570	470	370	550	450	350	660	560	460	670	570	470	780	680	580	730	630	530	840	740	640
2	16x6.50-8 AS				700	530	360	570	400	230	790	620	450	690	520	350	910	740	570	750	580	410	970	800	630
3	21x11.00-8 Terra										810	535	260	860	585	310	930	655	380	920	645	370	990	715	440
4	4.50-10 AS	460	340	220	610	490	370	550	430	310	700	580	460	670	550	430	820	700	580	730	610	490	880	760	640
5	5.00-10 AS	470	340	210	620	490	360	560	430	300	710	580	450	680	550	420	830	700	570	740	610	480	890	760	630
6	20x8.00-10 R				650	460	270	650	460	270	740	550	360	770	580	390	860	670	480	830	640	450	920	730	540
7	5.00-12 AS				660	505	350	570	415	260	750	595	440	690	535	380	870	715	560	750	595	440	930	775	620
8	23x8.50-12 AS				740	525	310				830	615	400	730	515	300	950	735	520	790	575	360	1010	795	580



(mm)

B		220	220 +B1	220 +B7		V	V +B7		V +60		Gf		Gf +S +90		G +V		G +V +90	
		A	A	S	i	A	A	i	A	i	A	i			A	i		i
1	4.00-8 AS	1110			460						1090	460						
2	16x6.50-8 AS	1240	1130		450													
3	21x11.00-8 Terra	1260			260				1540	440			1444	440			1444	440
4	4.50-10 AS	1150			460	940		460			1154	460			1154	460		
5	5.00-10 AS	1160			450	930		450			1164	450			1610	450		
6	20x8.00-10 R	1190			360	1120		360							1120	360		
7	5.00-12 AS	1200			440	1060		440							1204	440		
8	23x8.50-12 AS	1280		1200	400	1260	1140	400							1284	400		
9	23x8,50-12 AS			1200	270	1370	1130	270										

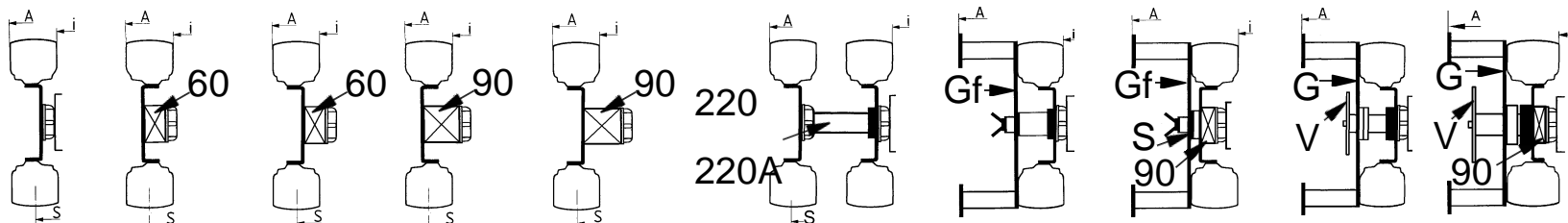
30 = 2516 011
 60 = 5516 021
 90 = 5519 031
 220 = 5616 511
 220A = 5519 011
 V = 5916 211
 S = 762 32
 Gf (10") = 5817 511
 G (10") = 5917 011
 G (12") = 5917 021

2. Specifications


Steering Brake Clutch Version

agria

Wheel combination and Track Widths Table 3400 KL



(mm)

B					60			60			90			90			220	220 + B1	220 +B5		Gf			Gf +S +90			
		A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	A	A	i	A	i	"	A	i	"	A
1	4.00-8 AS	630	530	430	640	540	440	750	650	550	700	600	500	810	710	610	1070			430	1090	430	8				
2	16x6.50-8 AS	760	590	420				880	710	540	720	550	380	940	770	600	1200	1080		420	1220	420	8				
3	21x11.00-8 Terra													960	685	410								1884	410	10	
4	4.50-10 AS	670	550	430	640	520	400	790	670	550	700	580	460	850	730	610	1110			430	1154	430	10				1154
5	5.00-10 AS	680	550	420	650	520	390	800	670	540	710	580	450	860	730	600	1120			420	1164	420	10				1164
6	20x8.00-10 R							830	640	450	800	610	420	890	700	510											1154
7	5.00-12 AS	720	565	410				840	685	530	720	565	410	900	745	590	1160			410							1200
8	23x8.50-12 AS	800	585	370				920	705	490				980	765	550	1240		1170	370							1280

30 = 2516 011

60 = 5516 021

90 = 5519 031

220 = 5616 511

220A = 5519 011

V = 5916 211

S = 762 32

Gf (10") = 5817 511

G (10") = 5917 011

G (12") = 5917 021

2. Specifications:

Petrol Engine Version

agria

Petrol Engine

Manufacturer: Robin

Type: EH 34 D

Version: Fan-cooled
1-cylinder-4-stroke engine (petrol) OHV

Bore: 84 mm

Stroke: 71 mm

Cubic capacity: 338 ccm

Output: 8.1 kW (11 DIN-HP)
at 3600 rpm

Max torque: 24.1 Nm at 2500 rpm

Spark plug: Bosch WR7CC
NGK BR6ES, Champion RN4

Spark plug gap 0.6–0.7 mm

Ignition system: Contactless
electronic magnet ignition,
ignition point is pre-set, radio remote
screened according to VDE 0879

Valve lash (engine cold)

Intake: 0.10 mm

Outlet: 0.10 mm

Generator: alternating current
..... 12V 90W

Starter: Recoil starter

Fuel: lead-free petrol,
refer to fuel recommendations

Fuel tank capacity: approx. 8 l

Air filter: Dry filter element with
foamed preliminary filter

Carburetor: Horizontal
float carburetor

Main jet: 97.5

Idle jet: 40

Mixture control

screw: Base setting 7/8 revs. open

Rated speed: 3600 rpm

Top no-load speed: 4000 rpm

Idling speed: 1400 rpm

Engine oil:

Filling quantity approx. 1.2 l
Multi-grade oil

at ambient temperature -15° to +45°C:
SAE 10W-40 API-SC (or higher)

at ambient temperature -25° to +15°C:
SAE 10W-20 API-SC (or higher)

Noise level:

Noise level

at operator's ear 84 dB(A)

(in accordance with EN 709 and EN
1553)

For values with implements see page
84

Operability on Slopes:

Engine is suited for use on slopes
(with oil level at "max" = upper level
mark)

Continuous operation possible:
up to 45° inclination (100%)

2. Specifications:

Diesel Engine Version

agria

Diesel Engine

Manufacturer: Yanmar

Type:

Electric starter version L100

Recoil starter version L100

Version: Fan-air-cooled
1-cylinder-4-stroke diesel engine

Bore: 86 mm

Stroke: 70 mm

Cubic capacity: 406 ccm

Output: 7.4 kW at 3600 rpm

Max torque: 27 Nm at 1700 rpm

Injection pressure: 200 bar

Valve lash (engine cold)

Intake: 0.15 ± 0.02 mm

Outlet: 0.15 ± 0.02 mm

Generator: alternating current

..... 12V 90W

Glass fuse 20A (30x6,5 mm)

..... (for electric starter version)

Starter: Recoil or electric starter,
depending on version

Battery: **12V 20Ah**

..... (for electric starter version)

Fuel: conventional fuel,

Min. cetane rating: 45
(refer to fuel recommendations)

Fuel filter:

Coarse-mesh strainer in filler neck

Fine-mesh strainer in fuel tank
drain hole

Fuel tank capacity: approx. 5.5 l

Air filter: Dry filter element with
foamed preliminary filter
and cyclone pre-separator

Rated speed: 3600 rpm

Top no-load speed: 3800 rpm

Idling speed: 1250 rpm

Lubrication: Pressure lubrication
via gear pump
Full flow oil filter

Engine oil:

Filling quantity approx. 1.65 l
Multi-grade oil

at ambient temperature -15° to $+45^{\circ}\text{C}$:
SAE 10W-40 API-SC (or higher)

at ambient temperature -25° to $+15^{\circ}\text{C}$:
SAE 5W-20 API-SC (or higher)

Noise level:

Noise level

at operator's ear 88 dB(A)
(in accordance with EN 709 and EN
1553)

Acoustic power level: 99 dB(A)
in accordance with EC 84/538/EEC at
85% of engine rated speed

For values with implements see page
84

Operability on Slopes:

Engine is suited for use on slopes
(oil level at "max" = upper mark)

Continuous operation possible
up to 20° inclination (37 %)

2

The two-wheel tractor 3400 is a basic motorised unit and is always used with an implement. Therefore it is most suitable for normal use in landscape gardening and in agriculture and forestry work for such as turning over the ground, mowing grass and meadowland, snow clearing and sweeping.

When the two-wheel tractor is used on public roads, the local national road traffic rules must be observed, e.g. reflectors, lights.

Available implements (among others):

- Rear implements for
 - hoeing and tilling
 - draft implements for soil cultivation
 - two-wheel trailers
 - gravel and salt spreading
- Front implements for
 - mowing
 - sweeping
 - snow clearing and tilling
 - gravel and salt spreading

For a choice of further attachments refer to our price list.

Engine

- The **four-stroke petrol engine** runs on commercial petrol (refer to fuel recommendations p9).

Ignition System

The engine is equipped with a contactless ignition system. We recommend to have necessary check-ups done by an expert only.

- The **four-stroke diesel engine** runs on commercial diesel fuel (refer to fuel recommendations p9). See to using proper fuel in winter.

During the first 20 operating hours (break-in period) do not use engine to maximum power.

Even after break-in period never use engine at higher speed than necessary for the work in hand.

i High engine speed is harmful to any engine and considerably affects its durability. This applies especially for no load operation. Any overspeed (have the engine roar) can result in immediate damage.

Cooling System

Cooling system is fan-cooled. Therefore keep screen at recoil starter and cooling fins of cylinder clean and free from sucked-in plant trash.

Idling Speed

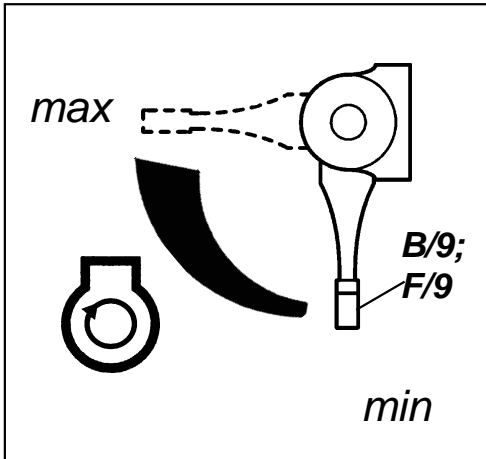
Always ensure that idling-speed is adjusted correctly. At low speeds and with the speed control lever set to idle, the engine is supposed to run smoothly and without run-out.

Air Filter

The air filter purifies the air intake. A clogged filter reduces engine output.



Please note that only the information on the engine is explained here which is necessary for the operation of the two-wheel tractor. All other information about the engine may be obtained from the attached engine operating instructions.



Speed Control Lever

Petrol Engine Version

The speed control lever (B/9, F/9) on the steering handle is for stepless setting of engine speed from min. = idle to max. = full throttle.

3

Engine Shut-off Switch

Petrol Engine Version

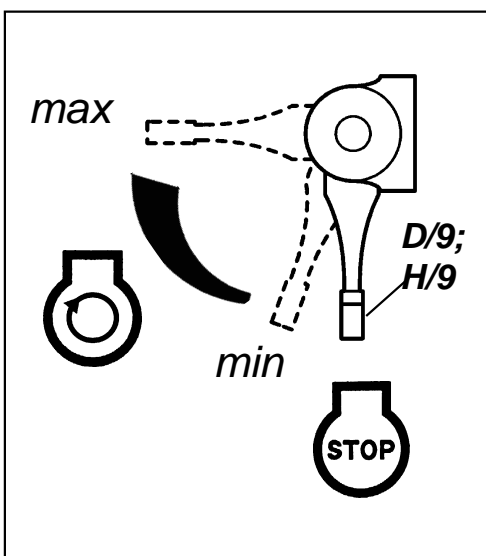
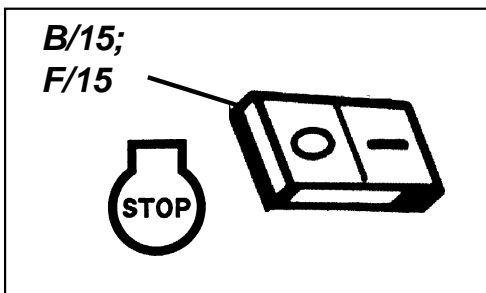
On pressing the electric shut-off switch (B/15, F/15), the ignition is turned on or off.

"I" = Operation position

"0" = Engine off position



The engine shut-off switch also serves to shut off the engine in an emergency. Set the switch to "0" for fast shut-off.



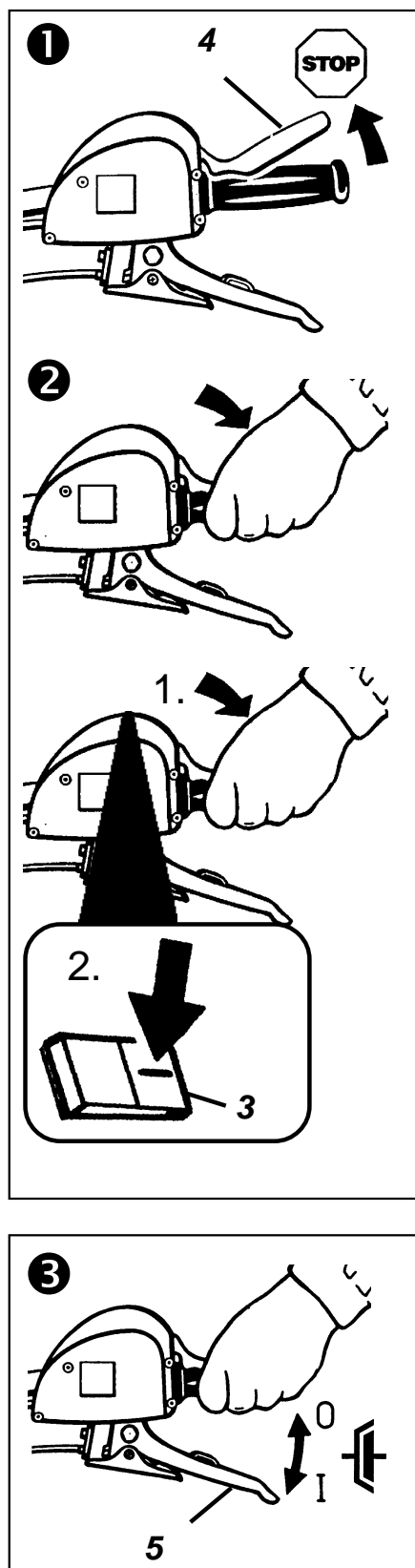
Speed Control Lever, Engine Shut-off Switch

Diesel Engine Version

The speed control lever (D/9, H/9) on the steering handle is for stepless setting of engine speed from min. = idle to max. = full throttle. The lever also is for shutting the engine off.



The engine speed control lever also acts as an **Emergency stop switch**: move to the "STOP" position in dangerous situations!



Safety circuit

The two-wheel tractor is fitted with a safety circuit.

① Stop setting: Clutch is not engaged when safety circuit lever (4) is not operated, but the engine continues to run.

② Operation setting: to operate press the safety circuit lever (4) down; this creates a power connection between the engine and gearbox through the solenoid clutch.

● The safety switch must be operated in two stages:

1. Press the safety lever (4) in downwards.
2. Operate press switch (3)

! When the drive to the wheels and power-take-off shaft is switched on, the wheels and the tools begin to turn immediately, therefore do not press the safety circuit lever down until the drives are at 0.

! Do not fasten safety circuit lever!

Clutch

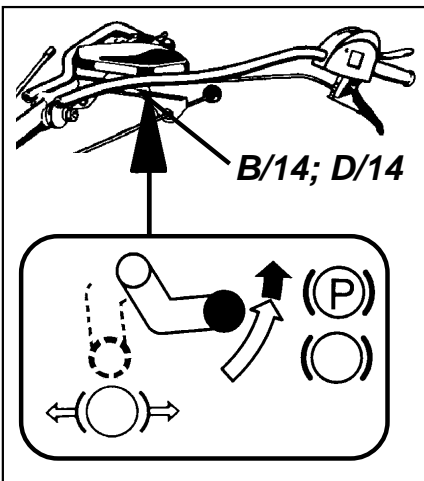
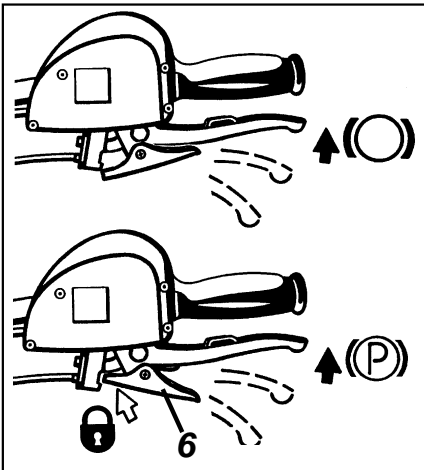
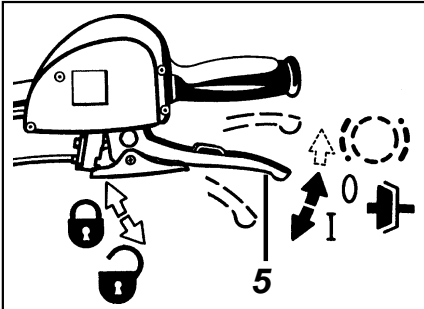
The machine is fitted with a solenoid clutch and is activated on using a switch which is located in the clutch lever. So that the clutch can be engaged smoothly a **soft start module** is arranged ahead of this.

The clutch lever (5) is intended to be used for pausing during operation, to carry out gear changes and power-take-off shaft changes.

③ When the clutch lever is pulled up to the setting "0" the clutch is disengaged, i.e. the engine is no longer driving the machine.

i The **soft start module** is fitted with overheating protection. When the clutch is operated several times the soft start module can overheat and switch off; the clutch can no longer be engaged.

- Wait until the soft start module has cooled down again.



Clutch with Safety hillholder

Differential version (not Overdrive version)

The safety hillholder serves to stop on slopes or during shifting.

The clutch and the safety hillholder are operated via the clutch hand lever (5).

- When the clutch lever is pulled half-way up to the setting "0" the clutch is disengaged i.e. the engine is no longer driving the machine.
- The safety hillholder is operated by further pulling the hand lever upwards.
- The lever is at the setting (○) with the pawl (6) available for locking = hand brake (P).

Central Brake

3400 Differential with Overdrive version

This version has no safety hillholder but has instead a combined central parking brake which is operated using the eccentric lever (B/14; D/14).

(○) Central Brake

Swivel the eccentric lever (B/14 or D/14) backwards and up – both drive-wheels are braked and clutch is disengaged.

Release the eccentric lever and the lever swivels back to the original position – brake is released.

(P) Hand Brake

Swivel the eccentric lever (B/14 or D/14) backwards and up beyond the dead centre. The eccentric lever automatically comes to a stop – both drive-wheels are blocked. To release hand brake, swivel eccentric lever back to original position – brake is released.

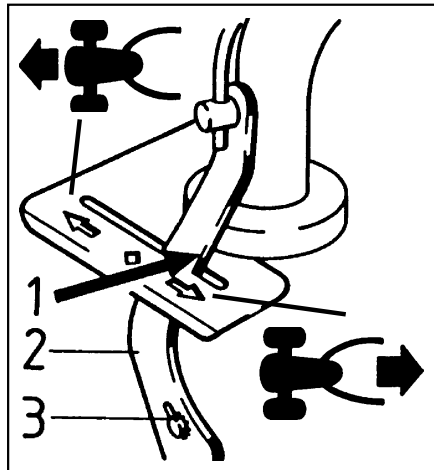
Brake

Steering Brake Clutch Version see page 36

Gearbox

The tractor is equipped with a 4-gear reversing transmission, giving you four gears for forward speed and four gears for reverse. **The 4th gear is automatically switched off when engaging the reverse gear (in the "two-wheel tractor" steering setting)!**

i Only change gears with the machine decoupled and stopped!



FR-Changing

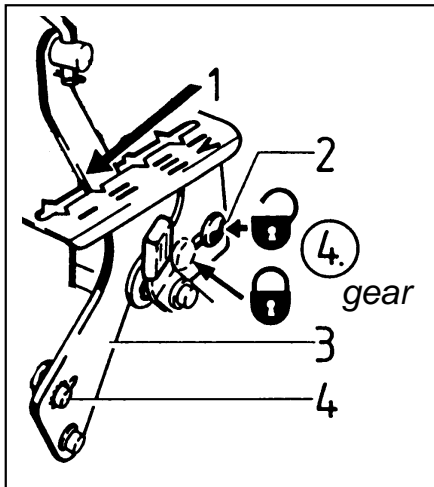
(B/7; D/7; F/7 or H/7)

↑ When you move the F/R-ball handle forwards, the two-wheel tractor goes forward

↓ When you move it backwards the tractors travels reverse

◆ Centre position ("0") means idling-gas

Edge (1) of gearshift lever indicates selected gear on shift gate.



Gearshifting


Gears 1–2–3–4 are engaged via gear-shift handle (B/8, D/8, F/8 or H/8).

There is **no** neutral position here.


● Edge (1) of gearshift lever indicates selected gear on shift gate.

i In general, you can only drive the two-wheel tractor, if FR-change is either in forward or reverse, no matter whether gear is engaged or not.

i When steering handle is swivelled 180° (for mounting front attachment) the ball handles change sides (refer to p39).

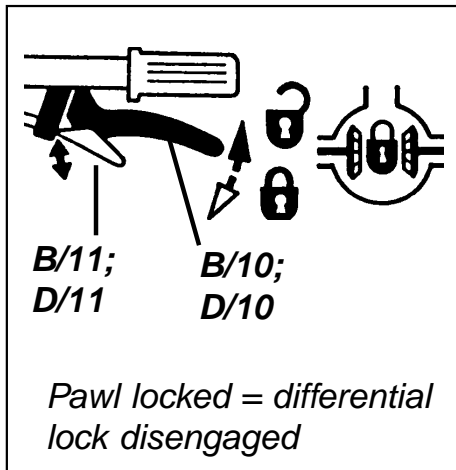
i The two-wheel tractor is delivered with a factory-fit screw on the shift-gate and is assembled in position "4th gear locked" .

This prevents accidental change into 4th gear to reverse (when working with attachments mounted). **Risk of accident!**

For drives with mounted trailer, this screw can be set to position "4th gear unlocked" . Loosen hexagonal nut slightly, move screw to position "unlocked" and tighten nut.



After driving, set screw back to position "locked".



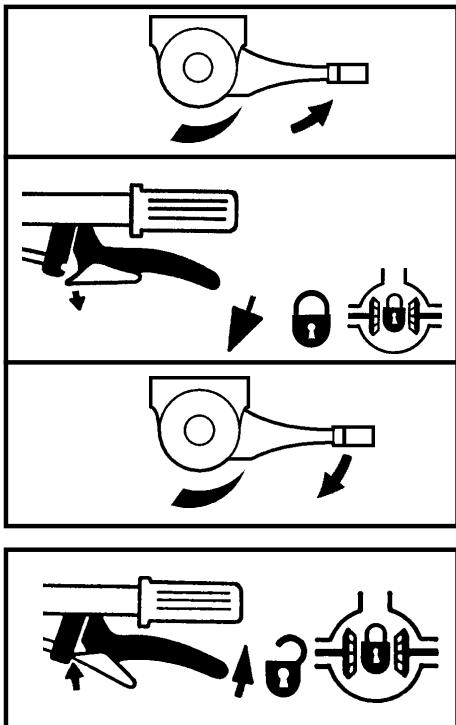
Differential Gear

Differential can be locked in severe conditions to improve traction. The lever for differential lock and unlock is on the right side of the handle bar. On the lever there is a pawl to lock the disengaged differential.

i Because of the tractor's easy steering, the differential should be unlocked when driving with the trailer mounted, especially in curves.

Keep differential locked only as long as necessary.

3



Engaging the Differential Lock:

(rigid wheel shaft)

On the move:

- Release throttle.
- Pull lever for differential lock slightly (B/10 or D/10).
- Unlock pawl (B/11 or D/11).
- Slowly release lever while pressing the throttle.

Disengaging the Differential Lock:

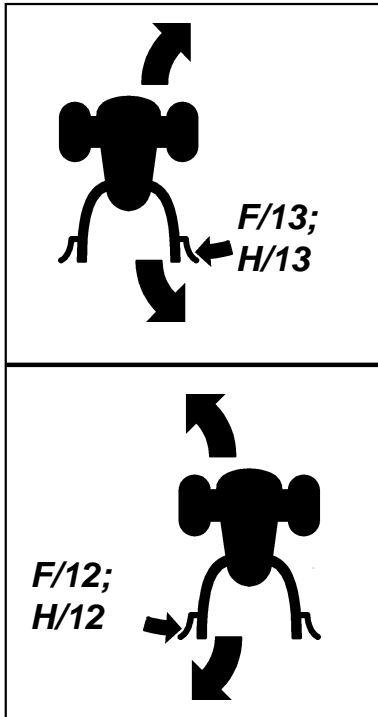
- Pull lever for differential lock until pawl locks into place.

3. Devices and Operating Elements

Steering Brake Clutch Version

agria

3



Single-Wheel Steering Brake Clutch

For easy turning, the two-wheel tractor is equipped with an easy-use steering brake clutch for both wheels.

To turn right, pull lever (F/13 or H/13) to decelerate the right drive-wheel. With forward speed engaged, the machine turns right.

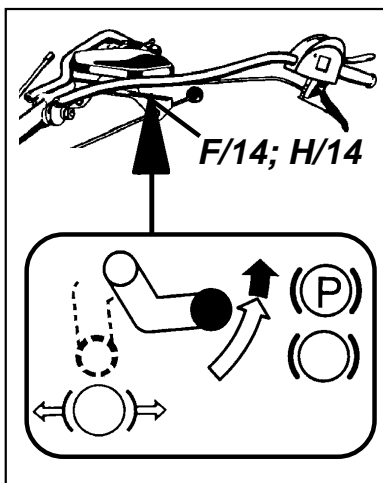
To turn left, pull lever (F/12 or H/12) to decelerate the left drive-wheel. With forward speed engaged, the machine turns left.



When turning on banks, always turn the machine towards the slope.



After swivelling the steering handle through 180°, reroute the cables that operate the steering brake clutch to ensure the right steering brake lever acts on the right wheel, etc. (see page 40).



Central Brake

To slow down or park the machine on hilly ground, use the combined central hand brake.



Central Brake

Swivel the eccentric lever (F/14 or H/14) backwards and up – both drive-wheels are braked and clutch is disengaged.

Release the eccentric lever and the lever swivels back to the original position – brake is released.



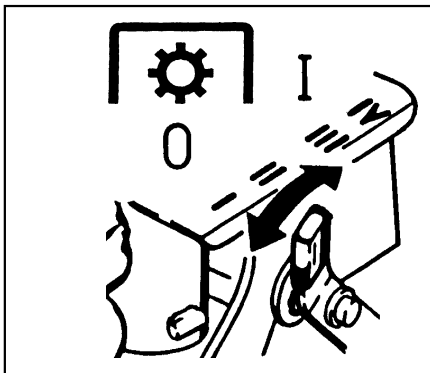
If the attached implement is prone to overload, you can operate the central brake without engaging the clutch. This disengages the wheel drive but not the PTO.

Once the overload is overcome, release the central brake to re-engage the wheel drive.



Hand Brake

Swivel the eccentric lever (F/14 or H/14) backwards and up beyond the dead centre. The eccentric lever automatically comes to a stop – both drive-wheels are blocked and clutch is disengaged. To release hand brake, swivel eccentric lever back to original position – brake is released.



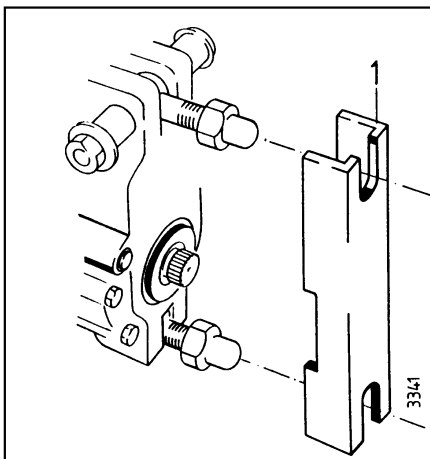
PTO

The PTO (A/12; C/12; E/12; G/12) cannot be turned off (i.e. it rotates whenever the engine is running). PTO speed is changed on the PTO driven implements. However, the PTO speed shift lever (B/1; D/1; F/1; H/1) is positioned on the two-wheel tractor and is connected to the speed shift lever on the implement via the PTO connecting stick (A/13; C/13; E/13; G/13).

Exception: For hoeing/tilling attachments, the shift lever is positioned on tilling drive for ease of use.

PTO Protective Cap

3



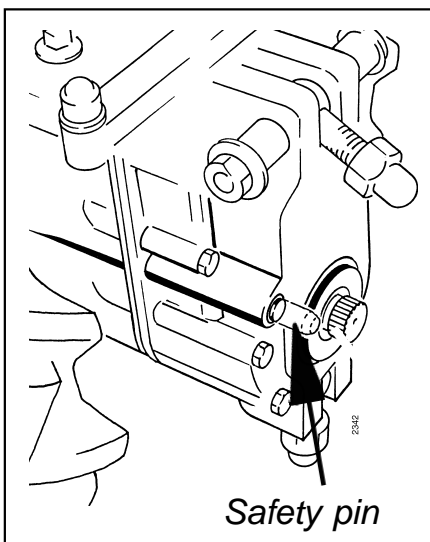
If no implements are mounted (e.g. trailer, plough, harrow), clothes might be caught and wound up by PTO. Therefore, PTO must be covered with PTO protection cap.

Installing the cap:

- Hold protection cap against mounting flange.
- Fold both eye bolts into slots of protection device.
- Evenly tighten both cap nuts.

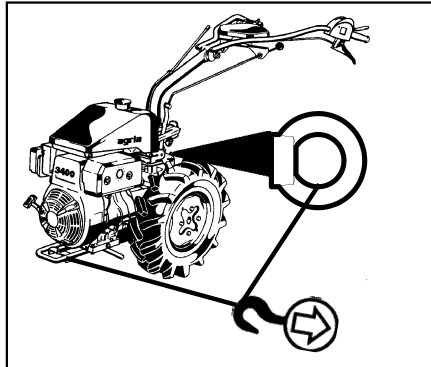
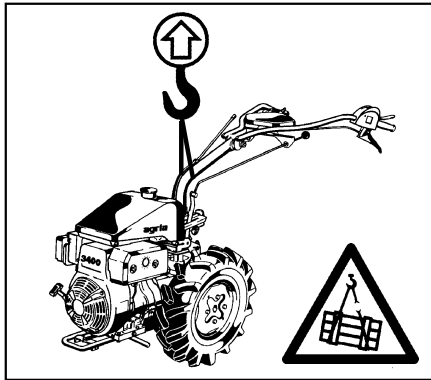
For de-installation proceed in reverse order.

Reversing Lock



The two-wheel tractor is equipped with a reversing lock (safety pin) for the hoeing attachment. This lock prevents that PTO is engaged from hoeing attachment while the tractor is in reverse. Also, it prevents that reverse gear is engaged while PTO is at work.

- When mounting the hoeing attachment, the FR-lever must be set to idling position, too (Safety pin on gearbox protruding approx. 5 mm).



Loading strap

When loading the machine and when hanging the retaining rope into place for work on slopes a loading strap must be placed around the handlebar - ensure that the bar locking lever is not bound.


Check loading belt for damage; replace it, if necessary.

Do not use any loading devices with sharp edges (e.g. sharp-edged hooks, lugs etc.).

Never walk or remain under moving loads. Danger!

Fixing Points

For towing away, recovering and tying down and to ensure a safe transport, use the

fixing points  at the connection flange and weight holder.

Steering Handle

⚠ Never re-adjust a steering handle when the machine is in operation – danger!

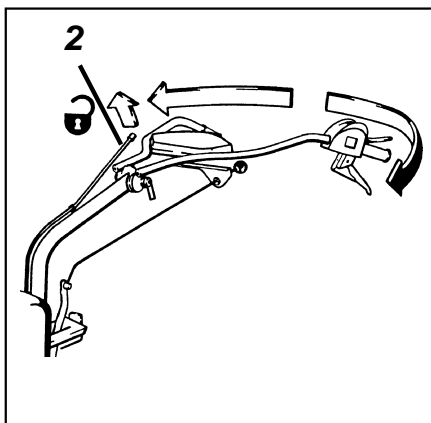
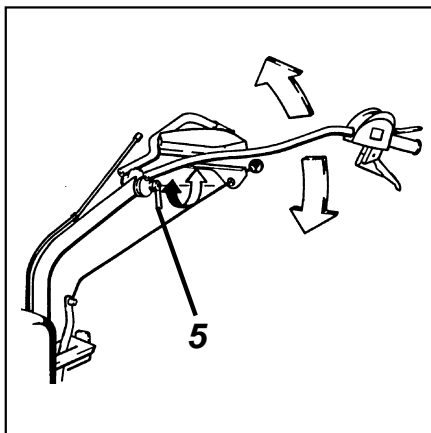
Steering Handle Height Adjustment

- Loosen clamping lever (5) until the notches are free.
- Bring steering handle (A/4; C/4; E/4; G/4) to the desired height and fit it in the appropriate notch.
- Re-tighten clamping lever.

Steering Handle Side Adjustment

From normal centre position the steering handle can be swivelled 30° to the right or left.

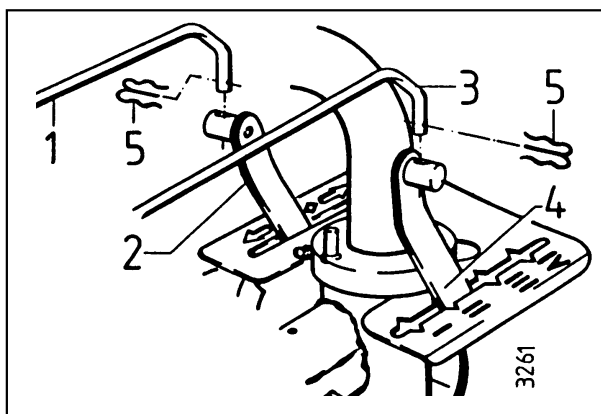
- Push up locking lever (B/2; D/2; F/2; H/2) and swivel steering handle to the right or left into desired position.
- Push locking lever back down and swivel steering handle slightly to the left and right until it locks into place.



Swivel Steering Handle

⚠ Only swivel steering handle when the engine is shut off.

For mounting front attachment, swivel steering handle 180°.



- Remove W-clips (5) from gear shifters (1+3), using ring hook provided in tool kit.

- Push locking lever (B/2; D/2; F/2; H/2) up. At the same time swivel steering handle clockwise 180° to the right (see figure below).

- Push locking lever back down and slightly rock steering handle to the left and right until it locks into place.

- Reconnect both gear shifters with outer shift levers (2+4) and secure with W-clips.

i Note: The gear-shift ball handle is now located on the left side of the steering handle. The FR-ball handle is now on the right.

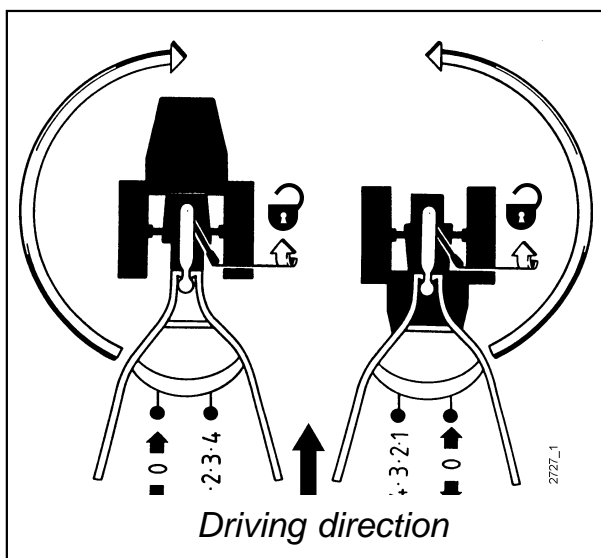
For 1st gear, now shift forwards, for 4th gear backwards (looked into driving direction).

For forward speed, you still shift forwards, for reverse backwards.

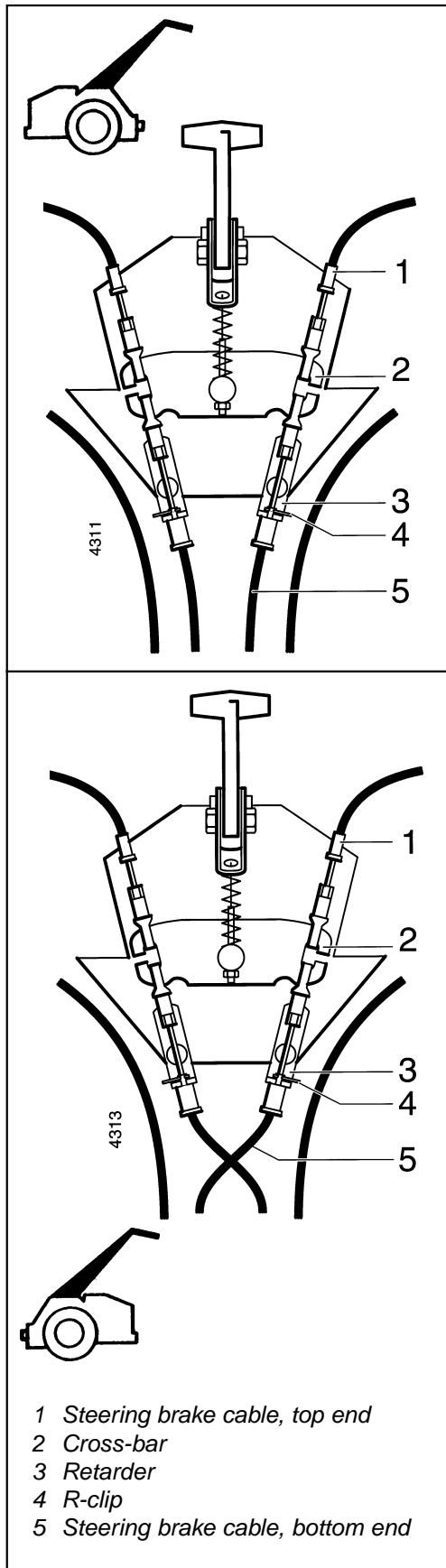
Steering handle side adjustment (approx. 30°) is also possible with steering handle swivelled for front attachments.

i On steering brake clutch machines, re-route the cables that operate the steering brake clutch to ensure the right steering brake lever acts on the right wheel, etc. – see following page.

Swivel back the steering handle
In the same order but anti-clockwise.



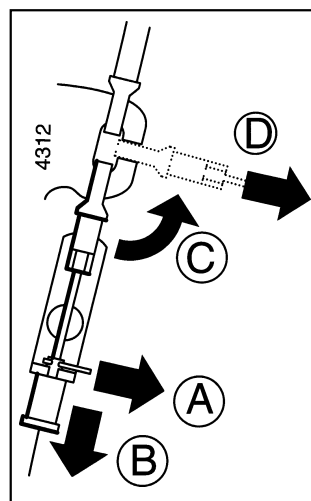
3



Re-routing steering brake clutch cables

On steering brake clutch machines it is necessary to re-route the cables that operate the steering brake clutch after the steering handle was swivelled through 180° to ensure the right steering brake lever acts on the right wheel, etc.

● Remove the steering brake clutch cables (5) at the bottom of the machine:



A Remove R-clip (4).

B Remove cables (5) from retarders (3), pulling them down and out.


C Swivel the cables outward.


D Remove the cables from the cross-bar (2).

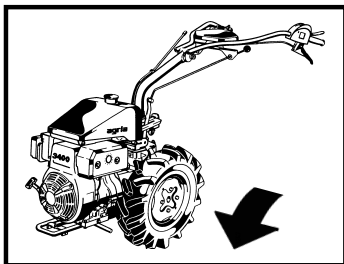
● Re-attach each cable (5) to the opposite end of the cross-bar and reverse the above order to re-attach them to the retarders.

● Remember to refit the R-clip (4) to secure the cables from working loose.

The illustration to the right illustrates the location of the cables:

 = two-wheel tractor operated as haulage machine or with rear-mounted attachments.

 = two-wheel tractor operated as tool carrier with front-mounted attachments.

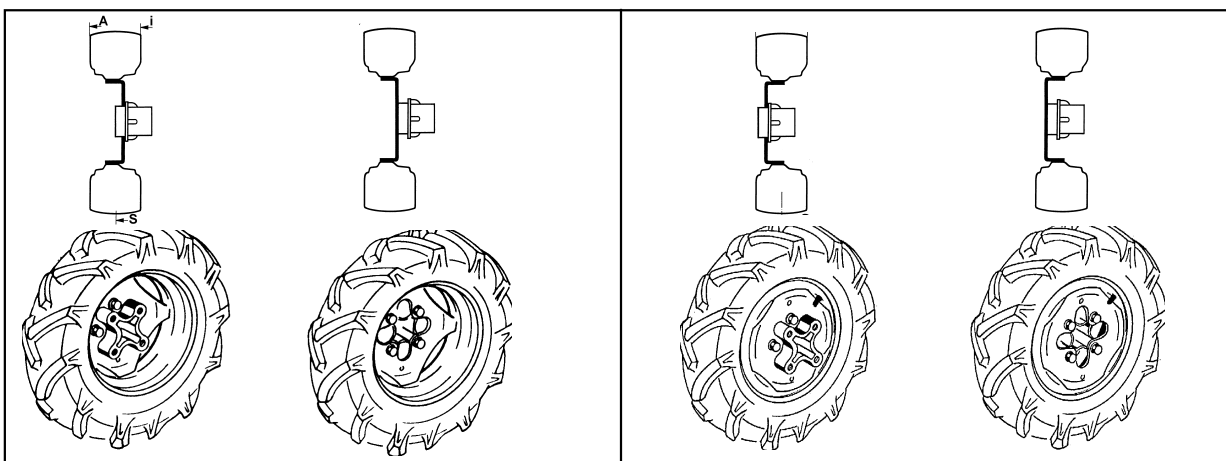


Drive-Wheels

For full tractive power, mount wheels with pointed parts of lugs showing in driving direction (wheels seen from above). Fit the countersunk side of spring-lock washer into countersink-type holes of disk wheel (see fig. "Wheel Attachment Bolts").

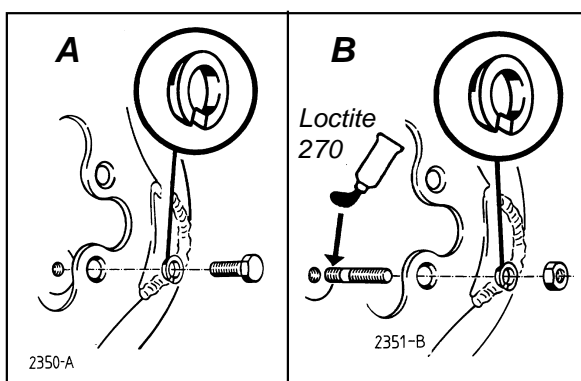
The wheels can also be mounted either on their inner or outer sides for variable track widths (see track widths table, p26+27).

Differential Version



The drive-wheels are mounted onto the inner or outer part of the hub adapter, depending on their use.

Wheel Attachment Bolts



Version **A** wheel bolt with spring-lock washer.

Version **B** locking bolt with spring-lock washer and wheel nut.

Screw short thread end of locking bolt tightly into hub, if possible, glue with LOCTITE 270 (or similar glue).




Fit countersunk side of spring-lock washer onto disk wheel.

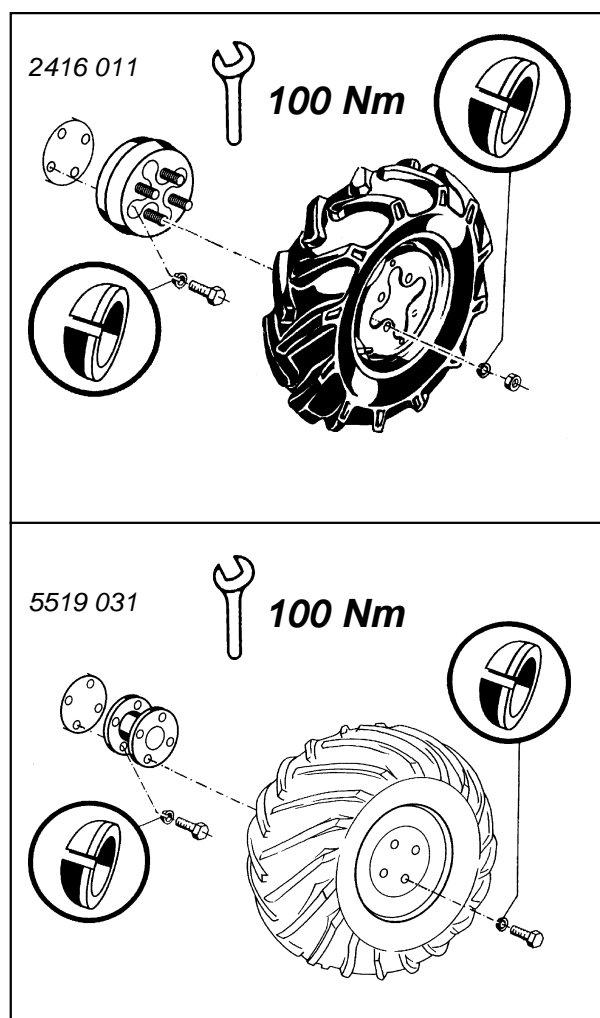
On a new machine or after wheel change, re-tighten wheel bolts and nuts after the first 2 operating hours with **100 Nm**. Re-tighten bolts and nuts in each maintenance.

Snow Chains

When working with snow chains fitted on wheels, observe manufacturer's instructions, make sure there is sufficient clearance between chains and machine parts.

Drive-Wheel Use

	Tyre	Tread Profile	Use	Item No.
	4.00-8	field tyre	tilling, from 42cm work width	2490 041
	5.00-10	field tyre	tilling, from 50cm work width, driving	0190 112
	5.00-12	field tyre	ploughing, harrowing	3291 051
	20x8.00-10	grass tyre	grass maintenance	3490 511
	21x11.00-8	Terra Grip	mowing on soft (boggy) ground	3490 611



Wheel-track extension system

Steering brake clutch machine

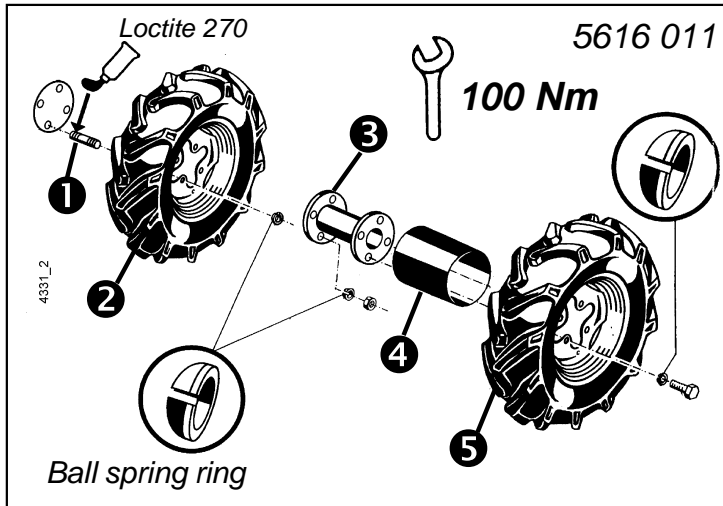
- Item 2416 011 used for mounting the 66cm outer width drive-wheels (with 5.00-10 agricultural tyres) for tillage work to give an outer width of 70cm.

- Item 5516 031 used to fit Terra Grip drive wheels 21 x 11.00-8 TG.

- i** It is recommended to use twin wheels, wheel centres or strake wheels for mowing areas **on extremely steep slopes**.

Twin Wheels

It is necessary to fit between the individual wheels:



Wheel-track extension for steering brake clutch machines

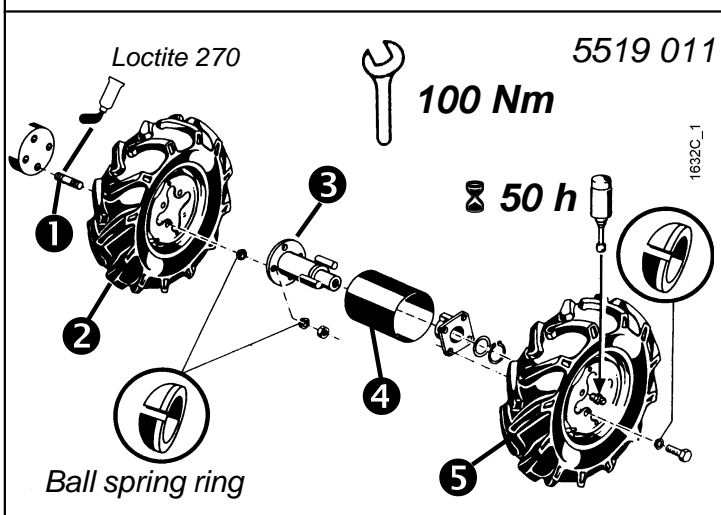
Item 5616011

Mounting **1** - **5**

Please note with regard to:

1 Use wheel attachment bolts version B (double end stud).

3 Fit ball spring rings between wheel bowl and wheel-track extension (centring).



Differential Hubs for differential version machine

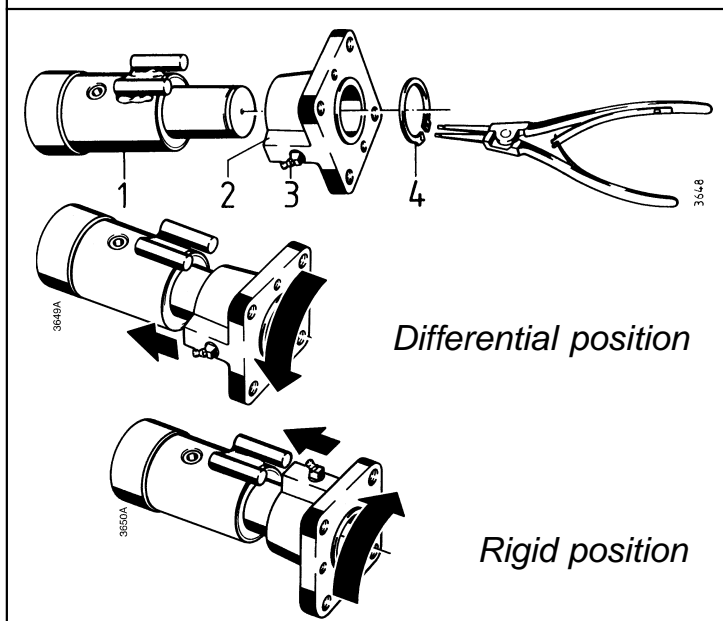
Item 5519011

Mounting **1** - **5**

Please note with regard to:

1 Use wheel attachment bolts version B (double end stud).

3 Fit ball spring rings between wheel bowl and differential hub (centring).

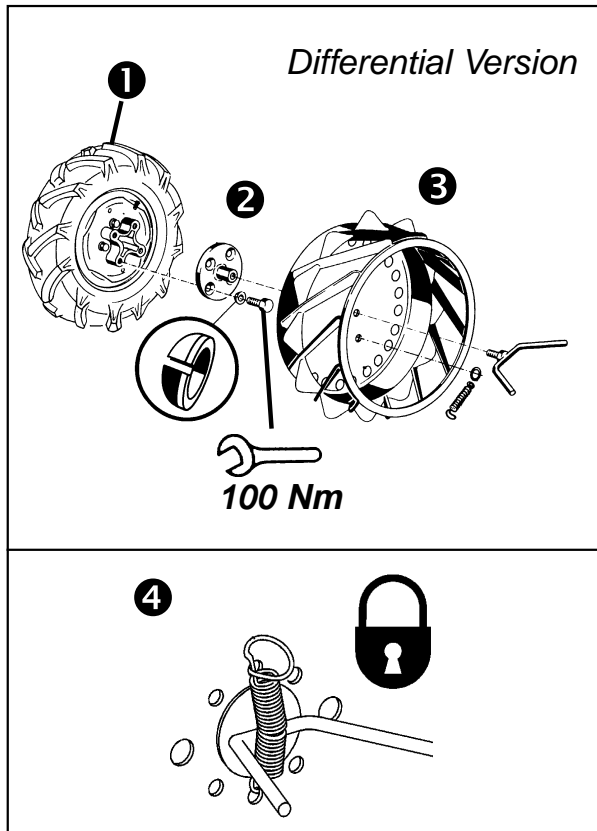


Lubrication

Use a grease gun to lubricate the wheel flange nipple (3) (with Bio-grease) after every **100** operating hours or after cleaning the machine with a pressure washer.

Adjustment

The differential hubs are factory-set to differential effect, mounting of rigid position see fig.



Strake Wheel

Item 5417 511 for drive-wheels 4.00-8

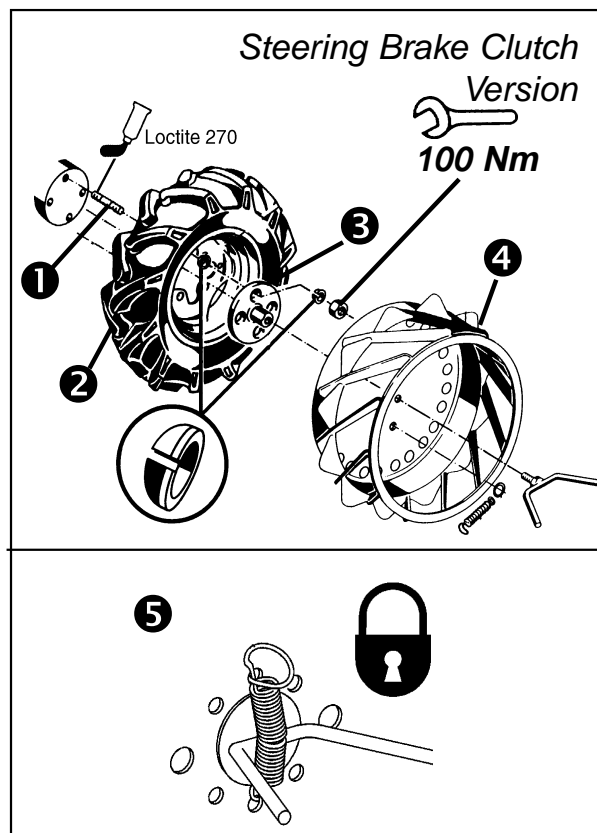
Item 5517 521 for drive wheels 5.00-10

Differential Version

Mounting ① - ④

Please note with regard to:

- ① Fit drive-wheels on inner part of hub adapters.
- ② Fit strake wheel flanges to outer part of hub adapters.
- ③ Make sure that the strake wheel webs face the machine in travel direction (see fig.).
- ④ Attach the tension spring to secure the tommy screw.



Steering Brake Clutch Version

Mounting ① - ⑤

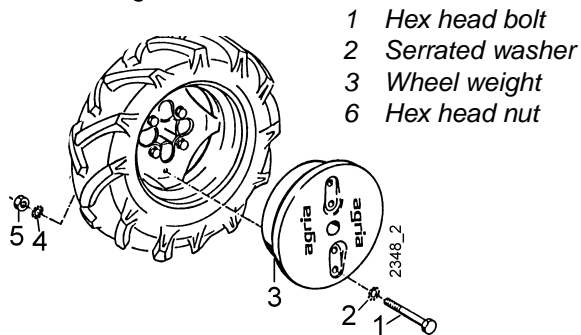
Please note with regard to:

- ① Use wheel attachment bolts version B (double end stud).
- ③ Fit ball spring rings between drive wheel and flange.
- ④ Ensure the strake wheel webs face the machine in travel direction (see fig.).
- ⑤ Attach the tension spring (9) to secure the tommy screw.

Front Weights and Wheel Weights

It is possible to attach front weights and wheel weights to improve traction.

Wheel weight for diff. version



Attaching Wheel Weights

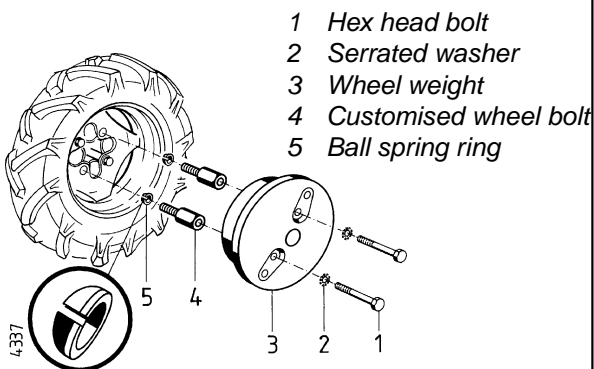
Item. No. 3221 051
for drive-wheels 5.00-10, 5.00-12

Differential Version

Attach the weights to the wheels with the hex head bolts, hex nuts and serrated washers.

Tighten the hex nuts well!

Wheel weight for steering brake clutch version



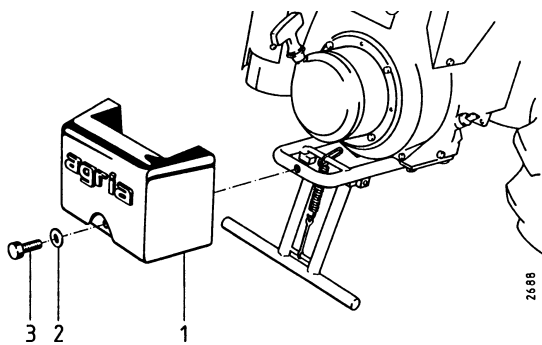
Steering Brake Clutch Version

Attach the drive wheels to the tractor using 2 customised wheel bolts (4; parts kit no. 760 33) instead of the standard wheel bolts and tighten them to a torque of 100 Nm.

Attach the wheel weights to the customised wheel bolts using the hex head bolts, hex nuts and serrated washers.

Tighten the hex nuts well!

Front weight



Front weight

Item no. 3228 011

We recommend to use a front weight to improve weight distribution when a heavy implement is attached to the machine.

Stand

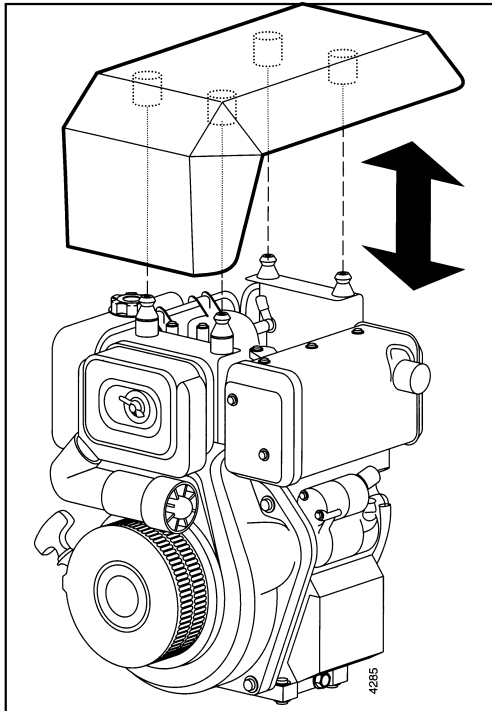
For parking the two-wheel tractor with no implement mounted and for better coupling of implements, the two-wheel tractor is equipped with a stand (A/16 or C/16) which is positioned at the front under the engine protection base. For parking the tractor, push the leg down and forward. For parking, push it back up.

3. Devices and Operating Elements

Diesel Engine Version

agria

3



Engine cover

Removing the engine cover

- Pull on the cover at its rear end and lift it
- Pull on the cover at its front end and remove it

Replacing the engine cover

- Place the rubber cups onto the ball-heads
- Then press gently on the front and rear cover ends to lock the cups onto the ball-heads.

i For an easier assembly, apply Bio-lubrication grease on the rubber cups.

Fuse

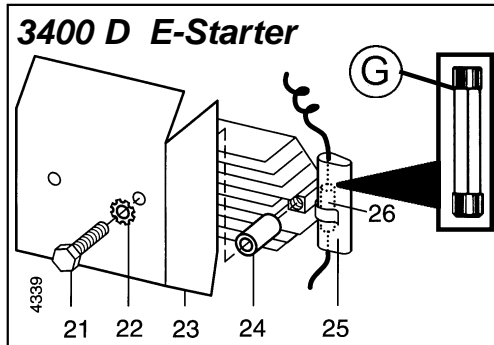
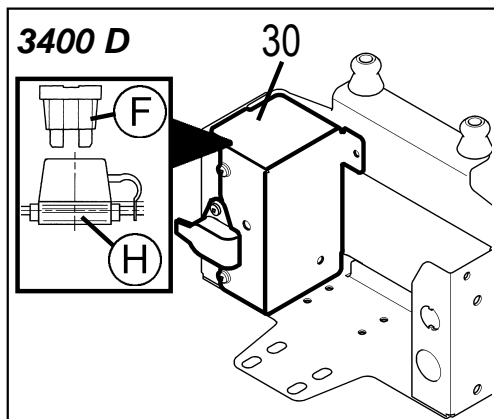
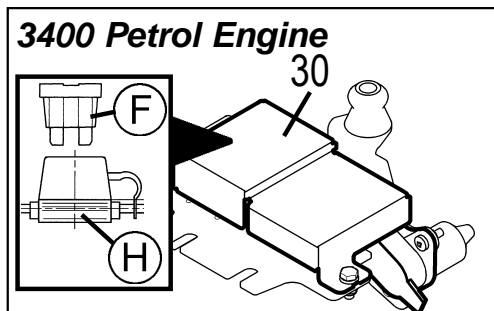
A fuse is located between the regulator and appliance to protect the regulator and generator from a short circuit induced from outside.

3400 Petrol engine and 3400 Diesel Engine Version

The fuse (F) is located under the cover (30). Where the fuse is defective, this must be replaced; to do this remove the cover and open the fuse holder (H). Ensure that you have a replacement fuse in good time (10A flat plug fuse).

3400 Diesel Engine with E-Starter Version

There is an additional safety element in this version between the voltage regulator and the electric starter. The fuse (G) is located on the engine under the panelling (J/23). Replace the fuse if it is defective. To do this, remove the panel (J/26) and open the protective bracket (J/25). Inside this bracket you will find a spare fuse. Ensure to provide another spare fuse in time (20A glass tube fuse).

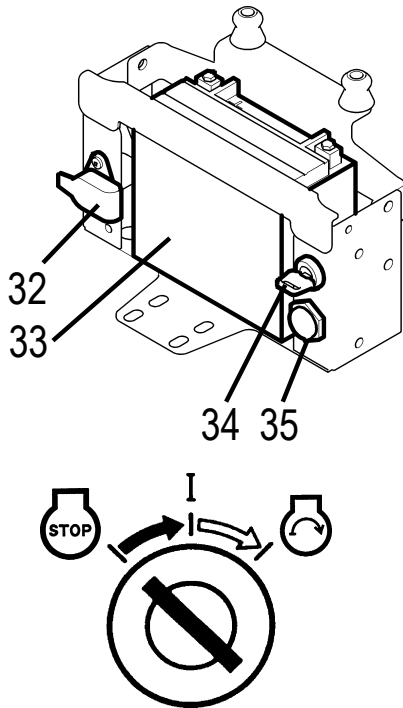


3. Devices and Operating Elements

Diesel Engine / E-Starter Version

agria

3400 D E-Starter



- 32 Socket
- 33 Battery
- 34 Starter switch with key
- 35 Battery charge control Beeper

Battery

There is no dry pre-charging of batteries on the new machines or trailers. Therefore the battery must be filled with accumulator acid and charged (charging current = 1/10 of battery capacity).

Starter Switch

The ignition start switch (34) for electric starter has 3 settings



0 = Charging current off, key removable

I = Operation



= Start position,
ignition key automatically goes into operating position „I“




Warning: Do not set ignition start switch to "0" while the engine is running. This can damage the charging regulator.

Warning Signal

A beeper (35) is fitted as a battery charge indicator.

The warning signal sounds when ignition key is in position "I" and the engine is at a standstill, and goes out as soon as the engine runs and the generator starts charging the battery.

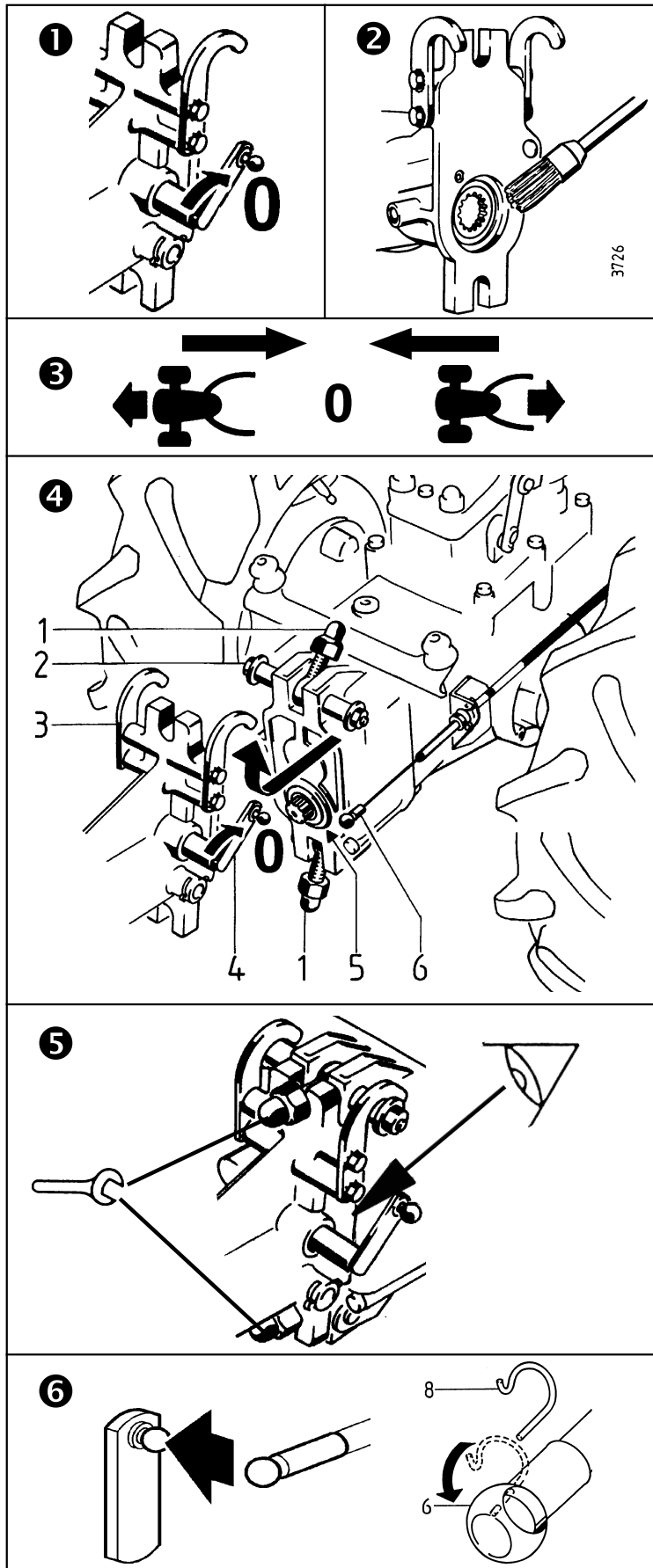
It also goes out when the ignition key is in position  or is removed.

If the warning signal sounds while the engine is running, the generator does not charge the battery correctly - Check fuses.

→ agria - Service ←

3

Mounting and Dismounting Implements



⚠ Only mount and dismount implements with engine off.

Mounting Implements

Ensure that coupling surfaces on two-wheel tractor and implement are clean.

❶ For PTO driven implements, set shift lever (4) on implement to position "0".

❷ Coupling sleeve should be slightly greased with bio-grease.

❸ When mounting hoeing and tilling implement, set FR-lever to "0", to prevent safety pin for reversing lock from protruding from coupling flange on base machine.

❹ Slide pegs (2) of base machine into hooks (3) of implement.

❺ Fold both eye bolts (1) over coupling flange.

Note:

- Are flanges (5) properly centred?
- Are flanges flat fitted?
- Tighten cap nuts evenly.

❻ For PTO driven implement, press PTO link (6) onto shift lever (4) until it locks into place. Insert circlip (8) and secure.

For dismounting, proceed in reverse order.

Commissioning

Please note that durability and operational safety of the engine depend to a large extent on its breaking-in. Always allow a cold engine to warm up for some minutes and never run it at full throttle at the beginning.

Please note: for the first **20** hours of operation (break-in period) do not use the engine at full power.

Make sure you check and maintain air filters regularly and use clean fuel. Only use branded petrol.

Only use fresh, clean fuel (not older than 3 months) and approved fuel cans to be purchased in special shops. Rusty sheet metal cans or fuel cans not suited for petrol are not permitted.

For the first commissioning or after longer periods of no operation, fill fuel tank to maximum to avoid starting problems.



Be careful when dealing with fuel.

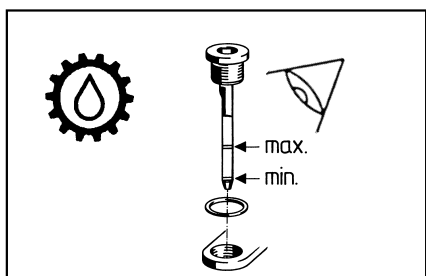


Fuel is easily inflammable and explosive in certain conditions!

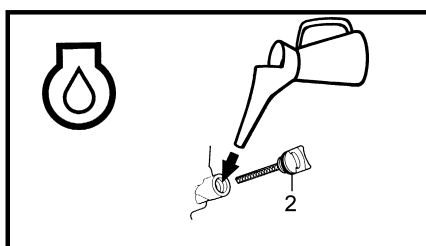


- Do not refill in closed rooms.
- Before each fuel fill, shut off the engine and wait until it has cooled off.
- Never refill close to open fire, inflammable sparks or hot engine parts.
- Do not smoke during filling!
- Do not spill any fuel, use a proper filling device.

Do not cause fuel tank to overflow, but leave a 5 mm margin for the fuel to expand.



- Check oil level in the gearbox and clutch housing ➡



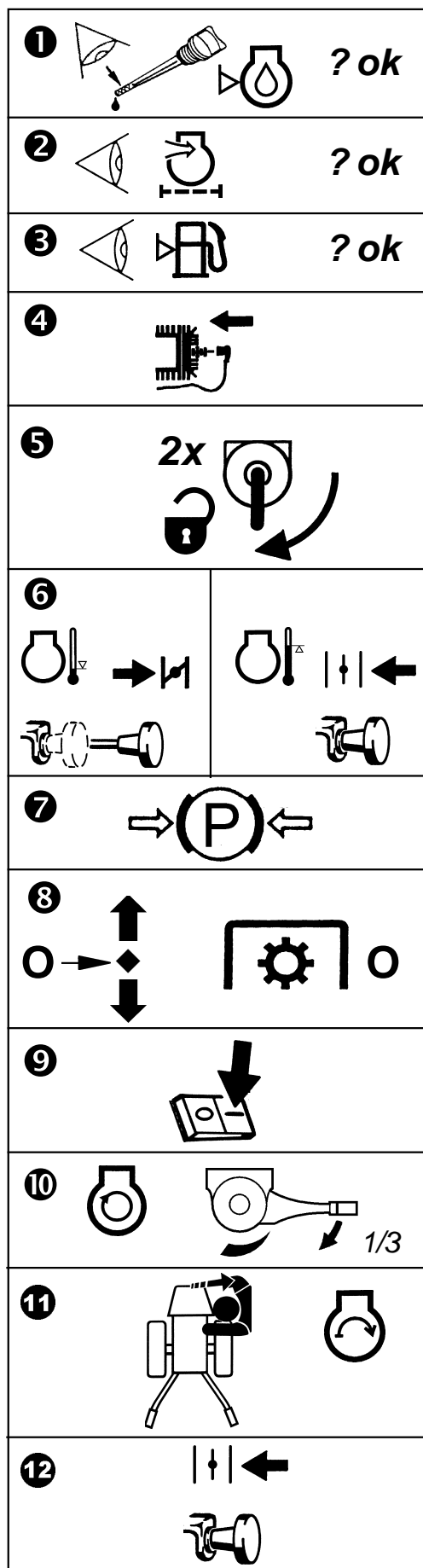
Note: For reasons of transport, the engine is not filled completely with engine oil!

Before you operate the engine the first time, fill in engine oil ➡

4. Commissioning and Operation

Petrol Engine Version

agria



Starting Petrol Engine

⚠ Never start engine in closed rooms. Exhaust fumes contain carbon monoxide, which acts toxic when inhaled.

- ❶ Check the engine oil level
- ❷ Air filter clean?
- ❸ Sufficient fuel is filled into the tank?
- ❹ Mount spark plug connector
- ❺ Open both fuel taps (K/3 + 15)
- ❻ Choke
 - **Cold engine:** pull CHOKE knob (K/5).
 - **Warm engine:** leave CHOKE knob in normal operating position or pull out half way
- ❼ Engage parking brake
- ❽ VR and PTO switch to "O"
- ❾ Set engine shut-off switch (B/15; F/15) to operating position ("I")
- ❿ Set speed control lever (B/9; F/9) to 1/3 throttle
- ⓫ Start engine from a position outside the danger zone.

Pull starting-rope on handle (K/6) until you feel starter clutch engage. Then **pull hard and fast** to start the engine. After the start, carefully let rope glide back. Do not let snap.
- ⓬ Once the engine has started, let it warm up for some time. Slowly push choke back into operating position, if necessary.

Commissioning

Please note that durability and operational safety of the engine depend to a large extent on its breaking-in. Always allow a cold engine to warm up for some minutes and never run it at full throttle at the beginning.

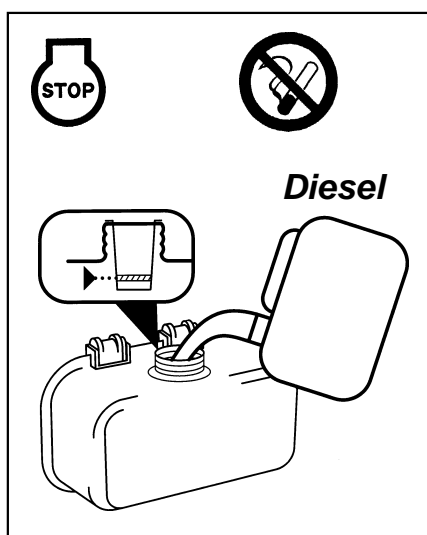
Please note: for the first **20** hours of operation (break-in period) do not use the engine at full power.

Make sure you check and maintain air filters regularly and use clean fuel. Only use branded diesel, ensure timely provision of “winter diesel fuel”



Only use approved fuel cans to be purchased in special shops. Rusty sheet metal cans or fuel cans not suited for diesel are not permitted.

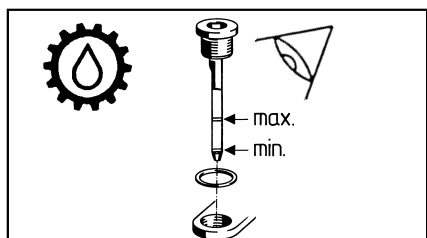
For the first commissioning or after longer periods of no operation, fill fuel tank to maximum to avoid starting problems.



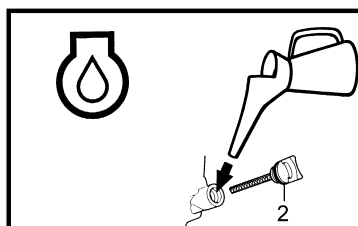
Be careful when dealing with fuel.

- Do not refill in closed rooms.
- Before each fuel fill, shut off the engine and wait until it has cooled off.
- Never refill close to open fire, inflammable sparks or hot engine parts.
- Do not smoke during filling!
- Do not spill any fuel, use a proper filling device.

Do not fill the fuel tank beyond the red mark on the filler strainer for the fuel to expand.



- Check oil level in the gearbox and clutch housing →



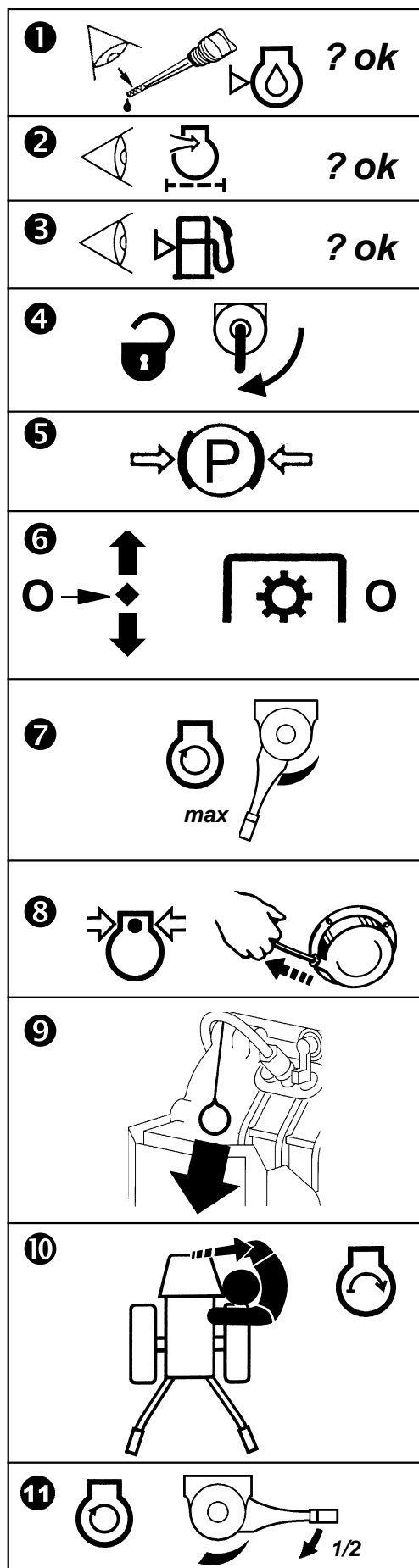
Note: For reasons of transport, the engine is not filled completely with engine oil!

Before you operate the engine the first time, fill in engine oil →

4. Commissioning and Operation

Diesel Engine / Recoil Starter Version

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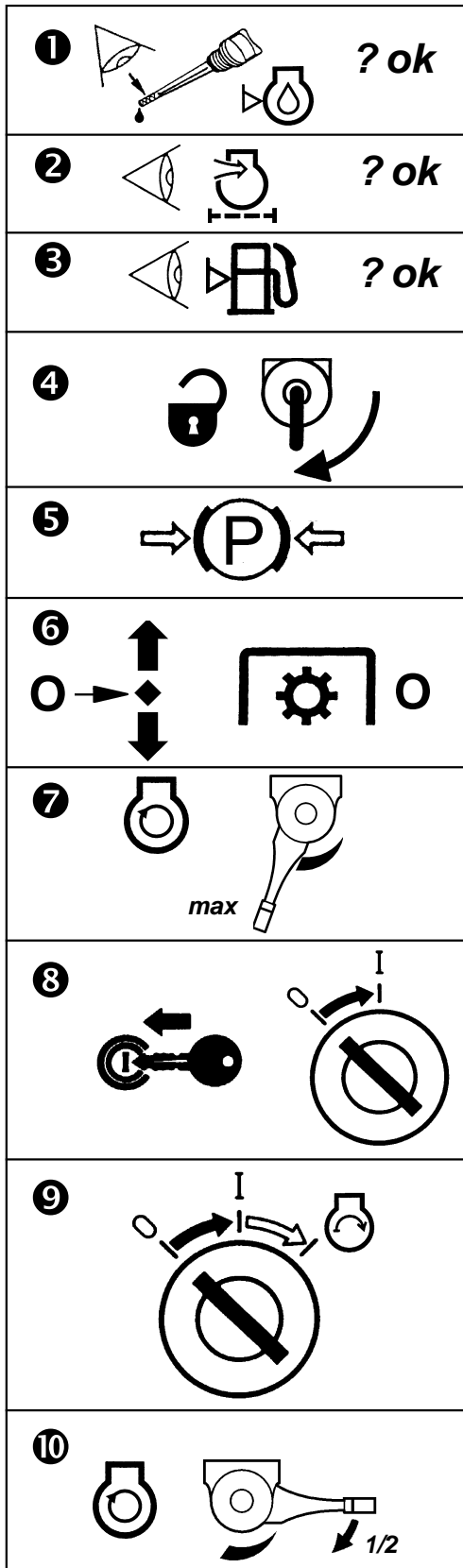


Starting Diesel Engine Recoil Starter Version



Never start engine in closed rooms. Exhaust fumes contain carbon monoxide, which acts toxic when inhaled.

- ❶ Check the engine oil level
- ❷ Air filter clean?
- ❸ Sufficient fuel is filled into the tank?
- ❹ Open the fuel tap (J/3)
- ❺ Engage parking brake
- ❻ VR and PTO switch to "O"
- ❼ Set speed control lever (D/9; H/9) to "max."
- ❽ Pull starting-rope on handle (J/6) until you feel resistance (piston in compressing position).
- ❾ Pull decompression rope (J/14) downwards.
- ❿ Start engine from a position outside the danger zone.
Pull starting-rope (J/6) hard and fast to start the engine. After the start, carefully let rope glide back. Do not let snap.
● Decompression automatically goes back into former position.
- ⓫ Slowly set speed control lever to centre position (half throttle) and let engine warm up for some time.



Starten des Diesel-Motors E-Starter

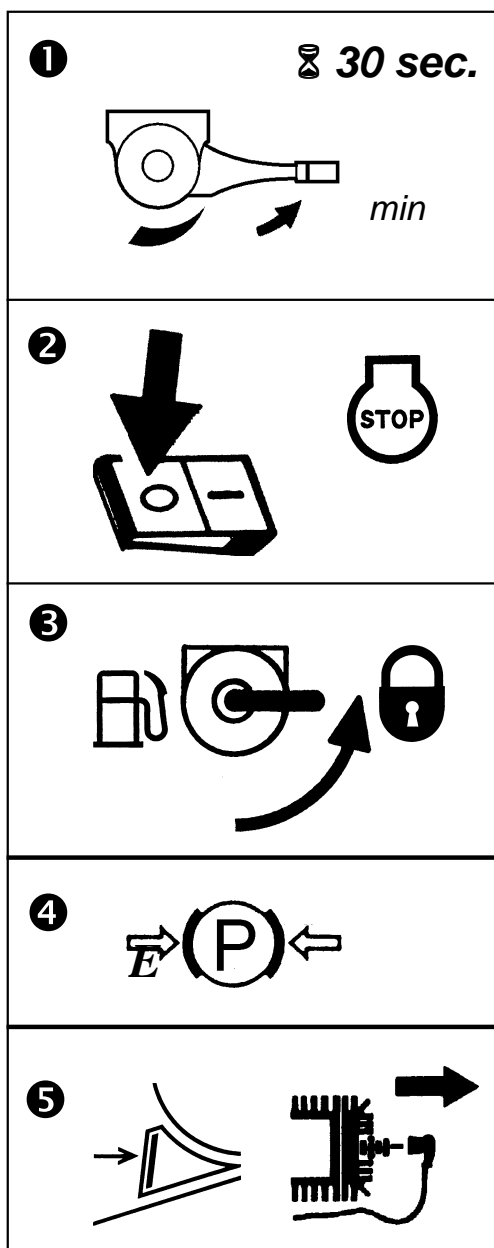


Never start engine in closed rooms. Exhaust fumes contain carbon monoxide, which acts toxic when inhaled.

- 1** Check the engine oil level
- 2** Air filter clean?
- 3** Sufficient fuel is filled into the tank?
- 4** Open the fuel tap (J/3)
- 5** Engage parking brake
- 6** VR and PTO switch to "O"
- 7** Set speed control lever (D/9; H/9) to "max."
- 8** Insert key into ignition-start-switch (C/25; G/25) and turn right to position "I"
- even when started using the reverse starter.
- Warning signal sounds
- 9** Turn ignition key further to the right to position "START".
As soon as the engine starts, let go ignition key – it automatically moves back into position "I". - Warning signal must stop.
If the engine does not start and re-start is necessary, turn key back to position "0" to repeat start (re-start lock).
- 10** Slowly move speed control lever to centre position (half throttle) and let engine warm up for some time.

4

Shutting off Petrol Engine



❶ Set speed control lever to idle position and let engine run idle for approx. half a minute

❷ Set engine-off-switch to “0”

❸ Close both fuel taps

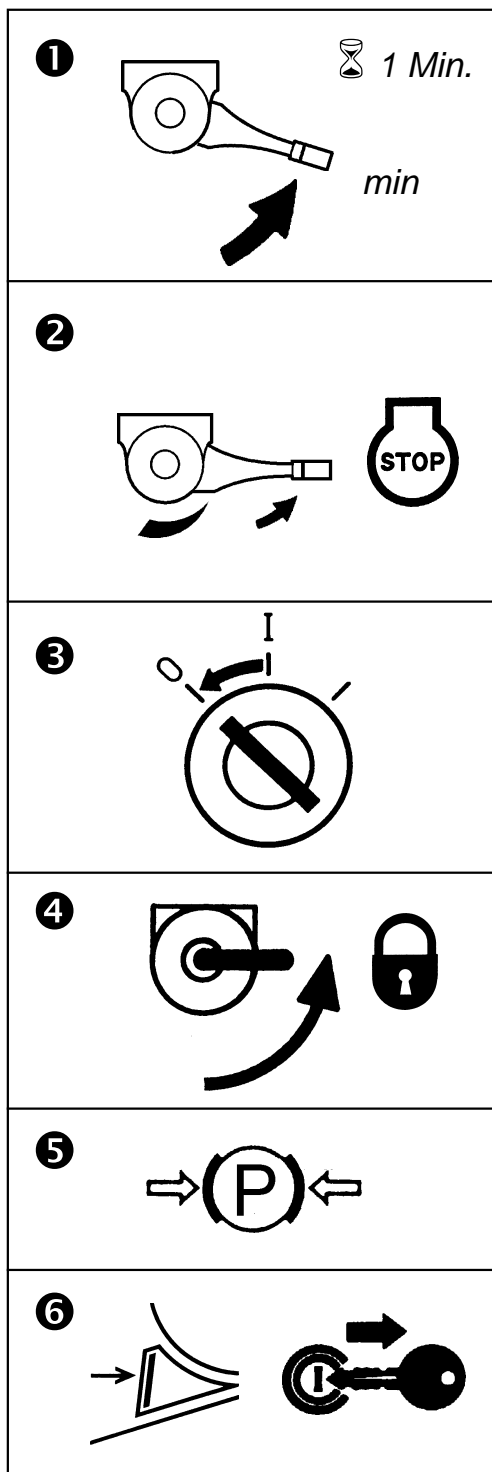
❹ Engage parking brake

❺ Secure two wheel tractor against unauthorized use – disconnect spark-plug connector.

❶ Engine-off-switch (B/15; F/15) also serves as **emergency off-switch**. If necessary, set switch to “0” to turn engine off.

❶ For parking the machine for longer periods of no operation, do not use engine-off-switch to turn off engine, but close fuel taps and let engine run until it slowly comes to a complete stop. This ensures carburetor to be empty and no resin residue to deposit.

Shutting off Diesel Engine



1 Before you shut off the engine let it run at increased idling speed for 1 minute to cool down and to avoid carbon to deposit on the injection valve. This ensures continued and reliable operation.

2 Set speed control lever (D/9; H/9) to “STOP”

i For shutting off the engine never activate decompression, as this might damage the valves.

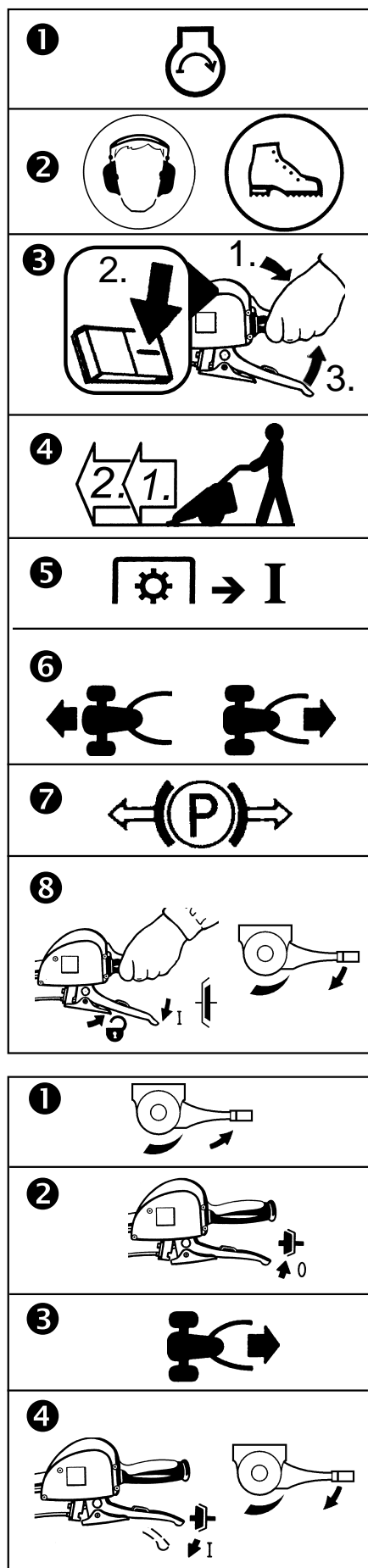
3 Electric-starter version: turn key back to position “0” – battery charge warning signal goes out

4 Close the fuel tap (J/3)

5 Engage parking brake

6 Secure two-wheel tractor against unauthorized use.

Electric starter version:
– remove ignition key.



Operations

❶ Start engine as described in "Starting the Engine"

⚠ **Check safety circuit function**
- Only operate the machine if safety circuit works!

❷ Wear individual protective ear plugs and safety shoes

❸ 1. Depress the safety circuit lever
2. Press switch to "I"
3. Pull the clutch lever

❹ Engage appropriate gear

⚠ **For work using the "Overdrive" version, in particular when cultivating the earth, do not engage the 4th gear! - Risk of accident! (Lock off the 4th gear with the locking screw, see page 34.)**

❺ For operations with PTO-powered attachments: Move PTO speed shift lever (B/1, D/1, F/1, H/1) forwards in driving direction – implement drive is turned on.

❻ Move F/R drive to position forward or reverse

❼ Release the brake

❽ Slowly release the hand clutch lever while pressing the throttle

Changing the travelling direction from forward to reverse:

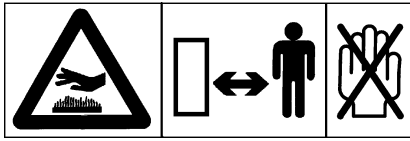
❶ Set speed control lever to idling position.

❷ Pull hand clutch lever and hold.

❸ Move F/R drive to position reverse.

❹ Slowly release hand clutch lever while pressing the throttle.

Proceed vice versa for direction change from reverse to forward.



Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.

⚠ Never leave two-wheel tractor unattended with the engine running.

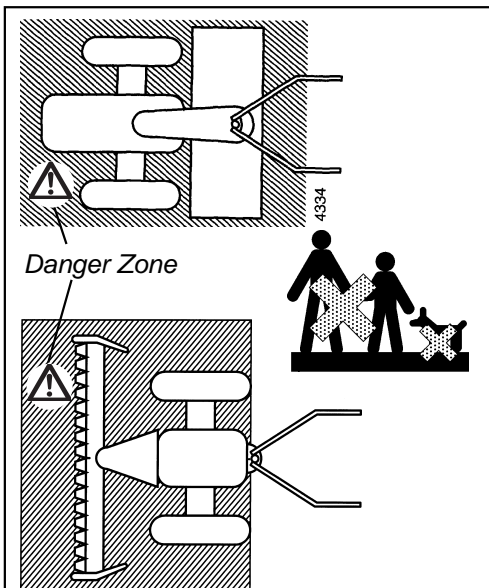
⚠ If cleaning becomes necessary during operation, the engine must be shut off and the spark plug connector disconnected or the ignition key removed for safety reasons.

Danger Zone

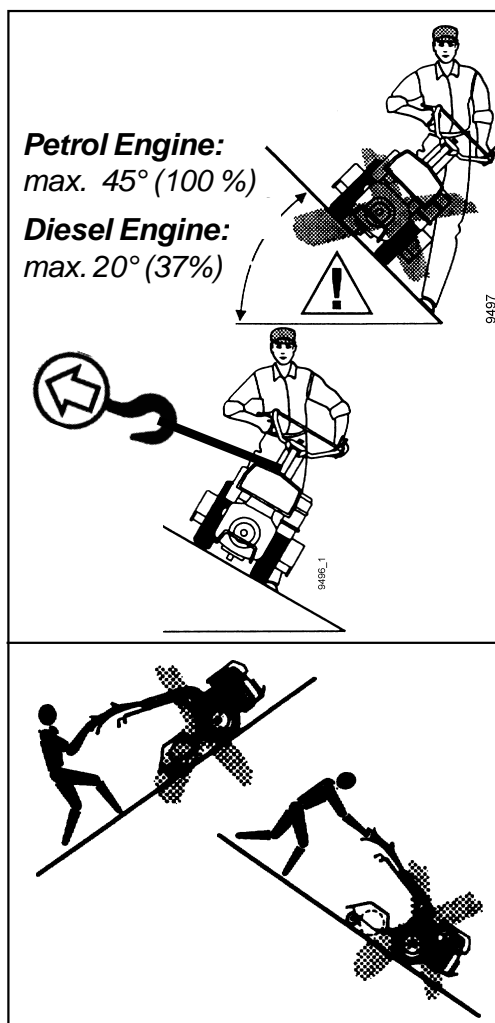
⚠ Keep out of the machine's danger zone during starts and operation.

If the operator should notice that a person or animal is staying within this area, the machine must be shut down without delay and must not be operated again before the area is free again.

The user is liable to third parties working within the working range.



4



Working on Slopes

⚠ To prevent the tool carrier from sliding on slopes make sure it is secured by another person using a bar or a rope. This person must stay at a higher position than the vehicle and at a safe distance from the attachment at work.

Always work transverse to the slope, never slope up or downward.

Note for Mowing

After mowing or in case of grass clogging:

- Set FR-ball handles to idle-position. The mower comes to a stop but not the knives, thus freeing the cutter bar from grass
- Set PTO speed shift lever to position "0".

Anti-Winding Devices

only differential version

For mowing long-stemmed plants, we recommend fitting protecting devices on both hub adapters to prevent plants from winding on.

Anti-winding kit: 3416 511

Safety references for the handling

- *Do not run the engine in closed areas, in which dangerous carbon monoxide can accumulate itself.*
- *Always wear safety shoes and long trousers during working. Do not operate the machine bare-footed or in lightweight sandals.*
- *Check completely the area, on which the machine is used, and remove all articles, which can be out-thrown by the machine.*
- *Only work at daylight or good lighting.*
- *Always pay attention to a safe stand on slopes.*
- *Only lead the machine in the step speed.*
- *Always work transverse to the slope, never slope up or downward.*
- *Be particularly careful, if you change the driving direction on slopes.*
- *Do not work on excessively steep slopes.*
- *Be particularly careful, if you turn the machine around or pull it to itself.*
- *When hoeing and tilling on difficult ground (stony, hard etc.) the machine may give sudden jerking movements in an upward and forward direction and therefore extra care should be taken under these conditions.*
- *Do not change the basic adjustment of the engine or overspeed the engine.*
- *Start the engine carefully according to the instructions of the manufacturer and respect on sufficient distance from the feet to the tools.*
- *Never lead hands or feet to or under turning parts.*
- *Never lift or carry the machine with running engine.*
- *The engine is to be turned off: - if you leave the machine; - before you refuel.*
- *Close the fuel tap after working.*
- *Never keep the machine with petrol in the tank within a building, in which possibly petrol vapors with open fire or sparks can come into contact or catch fire.*
- *If the tank is to be emptied, this is to be accomplished outdoor.*
- *Let the engine cool down, before you store the machine in closed areas.*
- *Replace for safety reasons worn out or damaged parts.*

Driving with Mounted Trailer

When driving the two-wheel tractor on public roads (whether with or without trailer), adhere to traffic rules, e.g. in respect of tail lights.

ⓘ Only differential version machines fitted with 5.0-10 drive wheels are permitted to tow a trailer on public roads.

The two-wheel tractor must be equipped with a generator and the trailer with lighting and flash-lights in accordance with national traffic rules.

Besides, the operator is required to carry a type approval both for the two-wheel tractor and the trailer attached.

4

Required Accessories:

1 pair of drive-wheels 5.00-10
..... Item No. 0190 112

1 pair of wings
..... Item No. 3424 011

1 two-wheel trailer
650 kg permissible total weight
..... Item No. 3481121

(Recommended gearbox version:
4th gear = 16 .9 km/h)

⚠ It is not allowed to ride on the trailer if attached to a steering brake clutch machine – risk of accident!

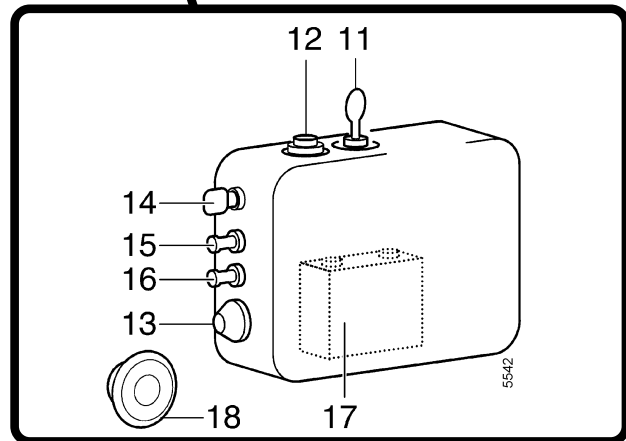
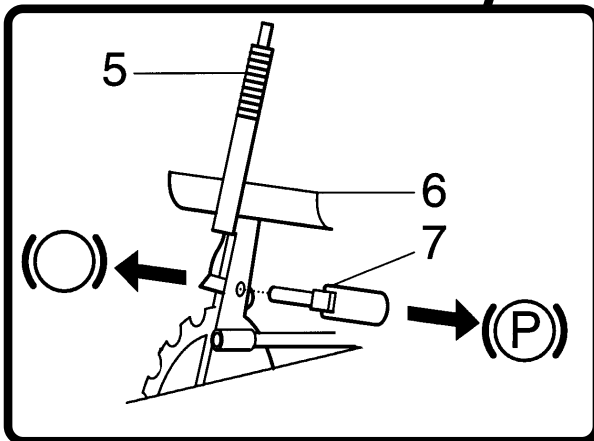
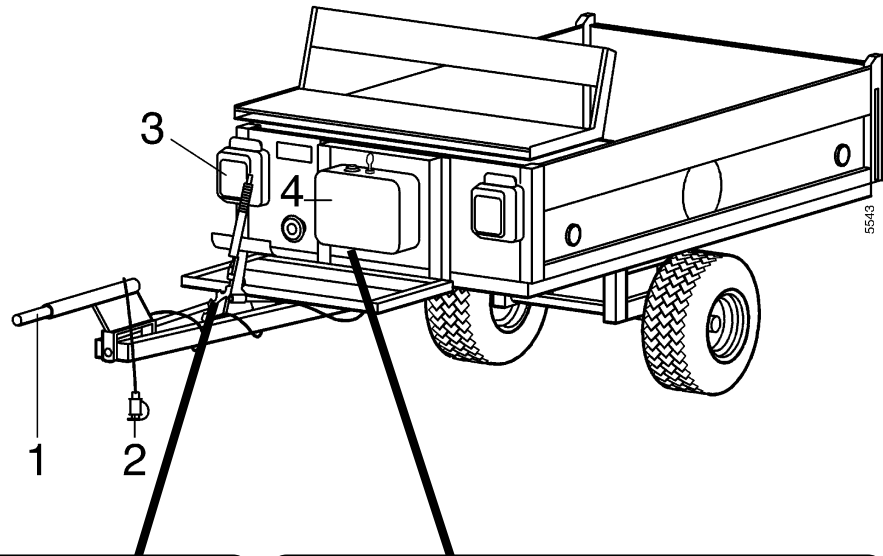
Preparations

- Fit drive-wheels (refer to page 41).
- Fit wings to gearbox housing with attachment bolts (A/10; C/10; E/10; G/10).

Coupling

- Mount trailer drawbar (1) onto tractor hitch (A/6; C/6; E/6; G/6).
- Insert socket pin (A/8; C/8; E/8; G/8) and secure with linch pin (A/7; C/7; E/7; G/7).
- Connect cable and connector (2) to socket (A/18; C/18; E/18; G/18) of two-wheel tractor.

- 1 Drawbar
- 2 El. Connector
- 3 Type plate
- 4 El. Control box
- 5 Hand brake lever
- 6 Brake pedal
- 7 Linch pin
- 11 Control box lock
- 12 Horn push button
- 13 Warning light switch
- 14 Turn indicator light
- 15 Main switch
- 16 Light switch
- 17 Battery 12V
- 18 Horn



4

Setting the brake

The two-wheel trailer is equipped with a combined operating/park brake. This must be set accordingly.

Operating brake = (O)

- Insert linch pin (7)

Park brake = (P)

- Remove linch pin (7)

Driving

● Before you start, switch on main switch (14) on the switch box. After driving, make **absolutely sure to switch off**, otherwise the battery will discharge.

● Check lighting and flash indicators.

● Check whether foot brake and hand brake of the trailer are operational.

● Set brake function to operating brake to ride on the combination. **Check braking.**

● Check tyre air pressure (regularly):

Two-wheel tractor 1.5 bar


Two-wheel trailer 2.5 bar

For smooth driving, make sure that tyre air pressure on rear and front pair of wheels is the same, respectively.

● Observe the permissible total weight of trailer; **avoid any overloading.**

● Hoeing and tilling implements must not be attached.

● Downhill-driving only with gear engaged! For steep downhill-drives engage 2nd gear.

 Do not lock the differential (the tractor steers easily, especially when travelling in curves).

Only keep differential lock engaged as long as it is necessary.

Danger Warning

Driving with the trailer requires a great deal of attention in order to guard against a loss of control and the danger of injury as a result of an imbalance effects on the pulling tractor.

The danger increases over-proportionately at increased speed, when travelling in curves and when travelling uphill and downhill.

When driving in reverse this danger is additionally increased through the discrepancy in alignment between the line of vision and body position, as well as the altered powers of steering and steering reaction.



Generally, and particularly when driving in reverse, you should observe the following rules:

1. **Look out for obstacles, particularly those at ground level.**
2. **Only drive at a speed at which you are always able to stop in time when confronted with any possible danger.**
3. **Only drive in reverse in 1st and 2nd gear.**
4. **When driving in curves, as well as when going uphill or downhill, adjust the speed accordingly.**
5. **Only brake using the trailer brake.**

Raised areas and dips in the ground, stones etc. could cause sudden shocks and throw the tractor to the side or vertically. Tractor steering control could be completely lost and the tractor could dip down a small amount at the rear as a result of large impacts on the steering, increased by shocks from the side. When driving in curves and across inclines, additional lateral forces are present which could possibly throw the operator out of his seat.

These effects and their consequences are increased even more at high speeds, when transporting loads, when driving in curves and/or driving uphill and downhill.

There is a danger of the operator losing control of the vehicle and being injured by the link handle or being flung from his seat. There is the possibility, as a result of this, of material damage and that people standing nearby, or the operator himself, could be injured by the vehicle.

⚠ Constant attention needs to be paid to the ground conditions. Where possible clear objects out of the way beforehand or drive slowly and in an ordered manner over them. Constantly keep possible dangers in mind. Drive slowly past obstacles, in curves, on inclines and on sloping areas.

Adjust your speed to the conditions on the ground and the weather situation.

Secure the vehicle against rolling away when parked on a slope.

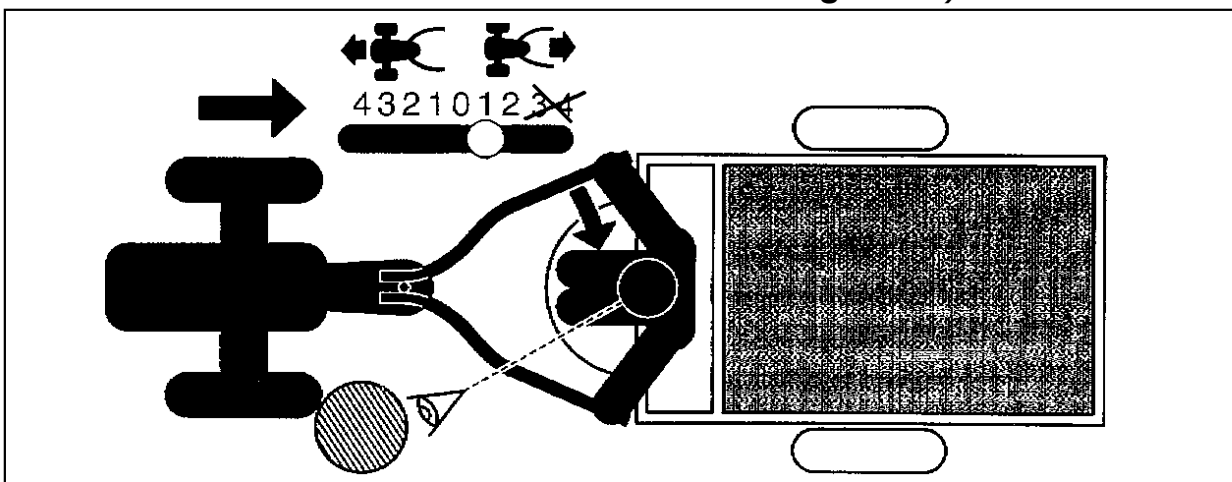
The operator should position himself so that in any dangerous situations he cannot be hit or injured by the steering wheel, that he cannot be thrown from his seat, and that he is always able to control the steering forces.

Select the steering lock according to the conditions of use, such that the lateral forces can be constantly kept under control by the operator.

Do not approach any obstacles at high speed.

Stop immediately in dangerous situations (Disengage the clutch and brake using the trailer. If necessary turn the engine off).

4





Apart from observing all operating instructions, it is also important to pay attention to the following maintenance instructions. Please note:

Please note:



Only do all maintenance work with the engine shut off and spark plug connector disconnected.



When working on mowing knives, wear safety gloves!

Engine

Checking Oil Level

- **each time you take up operation and after every 8 operating hours,**
- **only with engine shut off and tractor in horizontal position.**
- **Clean oil filler plug and surrounding parts.**
- **Remove oil filler plug, clean dipstick with a clean cloth and dip back into oil tank (do not screw in), take out dipstick and read oil level.**
- **In case oil level is below lower mark, refill engine oil (refer to "Specifications") until oil level reaches rim of oil filler neck.**

Changing Engine Oil

The first oil change is after 25 operating hours. Following oil changes are after 50 operating hours. Change oil while engine is still warm, but not hot – danger of burns!

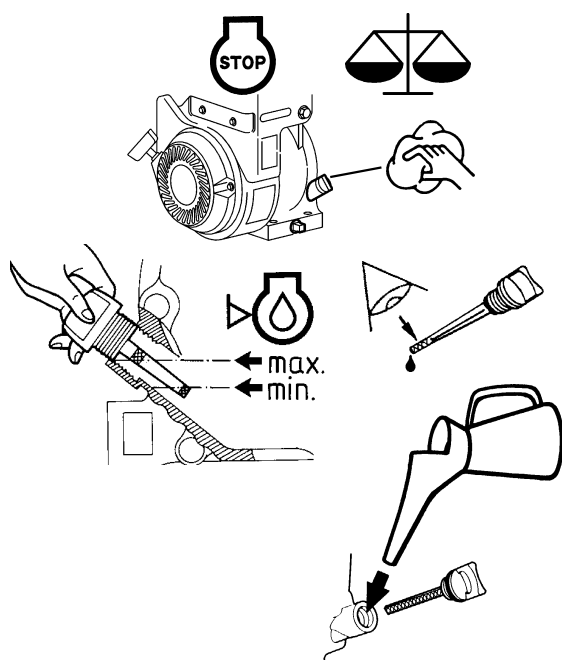
- **Clean oil filler plug, drain plug and surrounding parts.**
- **Change the oil and dispose of properly.**



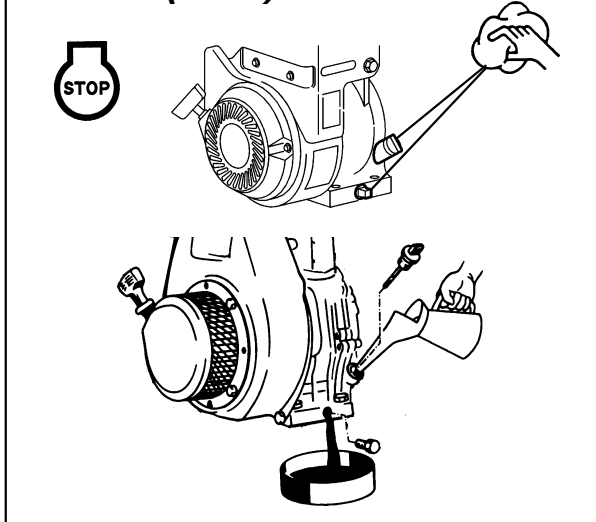
Check sealing washer for good condition and exchange, if necessary!

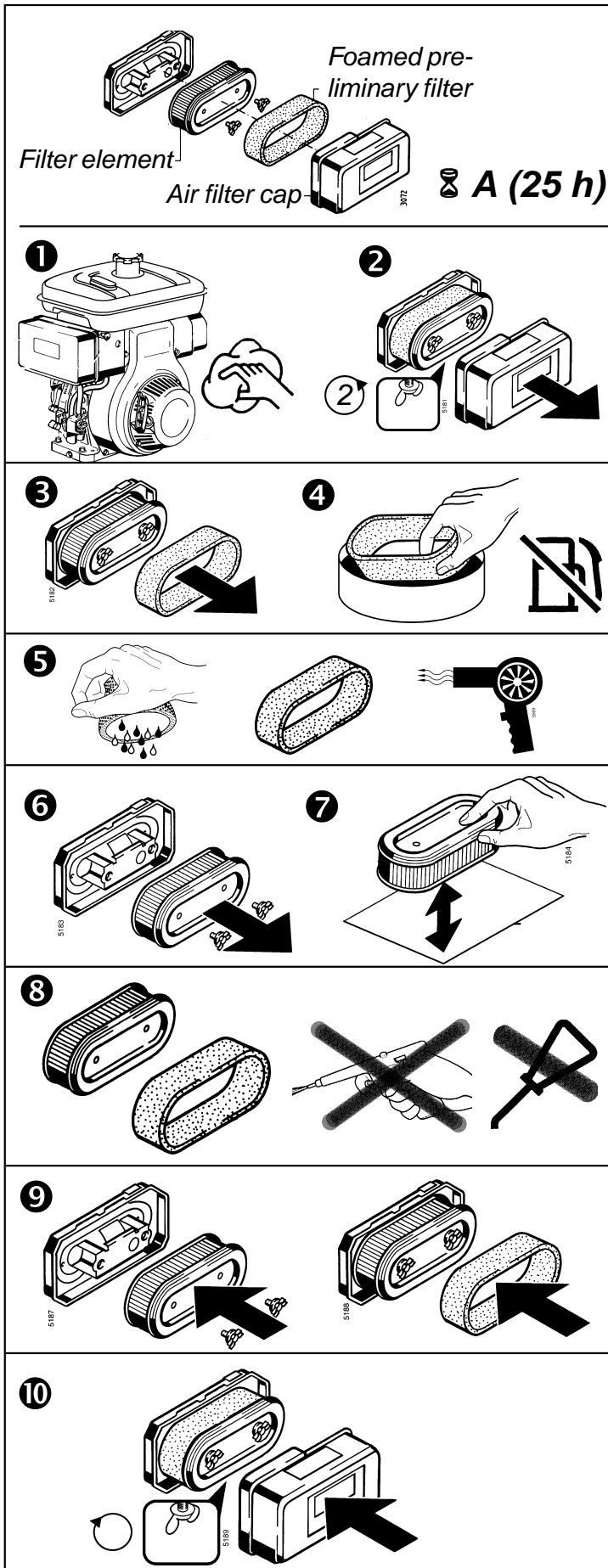
- For engine oil quality refer to "Specifications"

⌚ A; 8 h



⌚ 25 h (50 h)





Dry-Type Air Filter

When you take up operation check the air filter (K/4) on dirt, clean it if necessary.

Clean the air filter at least every **25** operating hours or at **3-month** intervals, after some hours in very dusty conditions:

① Clean the air filter and surrounding parts.

② Loosen the wing nut and take off the filter cap.

③ Carefully remove the foamed preliminary filter.

④ Wash the foamed preliminary filter in warm lye (do not use petrol).

⑤ Squeeze the foamed preliminary filter like a sponge and dry it.

⑥ Remove the filter element.

⑦ Tap the filter element against a smooth surface.

⑧ Do not clean the foamed preliminary filter and the filter element using compressed air and do not soak it in oil!

⑨ Reinstall the filter element and the foamed preliminary filter.

⑩ Reposition the filter cap and fasten the wing nut.

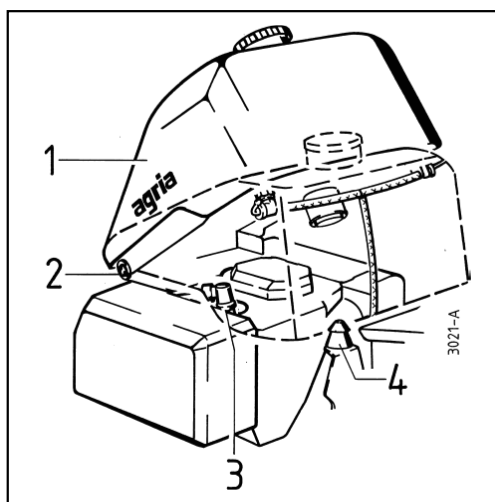
• Replace the filter element after **5 cleaning actions** or **approx. every 200** operating hours.

ⓘ Replace immediately damaged filter elements.



Please observe that only those activities are described here which are required for operating the two-wheel tractor.

All other information on the engine may be taken from the enclosed engine operating instructions!



Spark Plug

The spark plug (3) is arranged underneath the fuel tank:

- Fold up fuel tank (1).

If fuel tank does not stay up in folded position, tighten hinge screws (2) slightly until fuel tank stays up and still folds easily up and down.

- Place back:

fold back fuel tank and lock onto ball button (4).

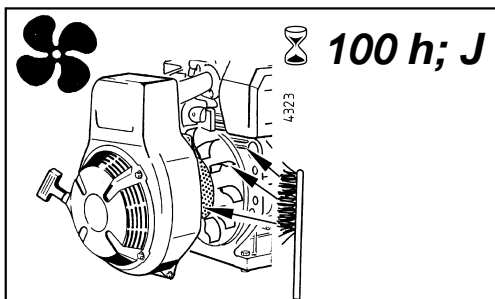
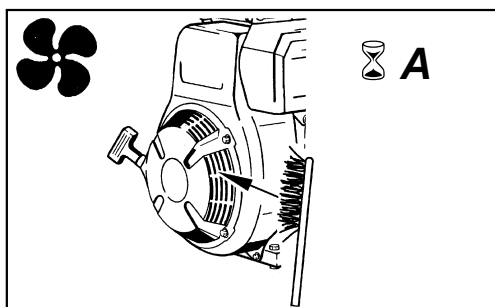
Cleaning the Cooling System

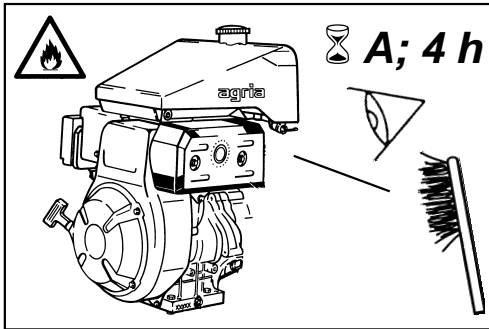
Clogging of plants and dust may occur in the cooling system. Operation with the cooling system clogged lets the engine heat up and causes damage.

- Always check cooling-air screen (K/7) and remove dirt and plants sucked in.

- Clean fan system at least **once per year**, preferably before the season starts. Take off fan case and clean cooling fins on both, cylinder and cylinder head, clean guiding plates and cooling-air screen, both serving for good air circulation. → **agria - Service** ←

5





Exhaust System

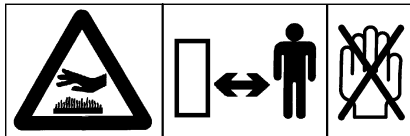
Check exhaust system (K/9) on a regular basis for plant trash and clean, if necessary. Otherwise

 **danger of fire** results.

Check each time before you take up operation.
Replace any damaged silencers.

Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.



Fuel Hoses

Exchange fuel hoses every **2 years**. Leaking hoses must be exchanged immediately.

Idling Speed


Always ensure that idling engine speed is adjusted correctly. Ensure smooth running of engine by positioning speed control lever to idling position at stop.

5

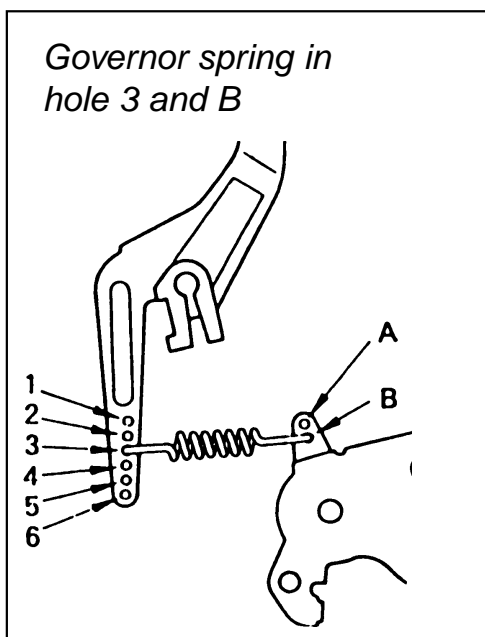
→ **agria - Service** ←

Idling Speed Governor

For correct functioning of the governor on the engine and for adjustment of upper idle speed ranges the governor spring must be in the appropriate place, see fig.

 **Any changes to the position of the spring cause warranty and type approval to become void.**

Keep governor spring, speed control lever and linkages free from dirt and plant trash at all times.





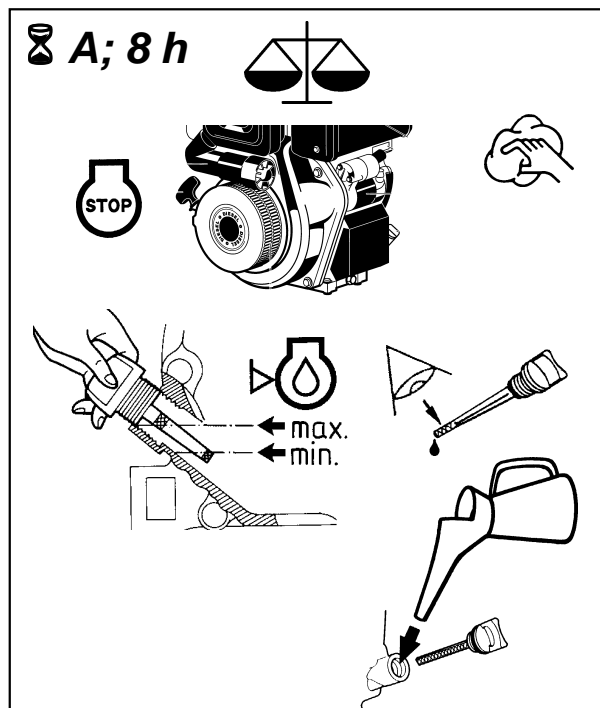
Apart from observing all operating instructions, it is also important to pay attention to the following maintenance instructions. Please note:



Only do all maintenance work with the engine shut off.



When working on mowing knives, wear safety gloves!

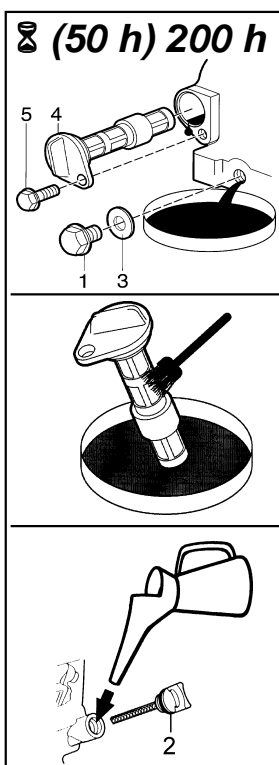


Engine

Checking Oil Level

- **Each time you take up operation and after every 8 operating hours.**
- Check only with engine switched off and machine in horizontal position.
- Clean oil dip stick and surrounding parts.
- Unscrew the oil dip stick, clean the dip-stick with a clean rag, re-insert it all the way and screw it in.
- Unscrew the oil dip stick and read the oil level.
- Refill oil, if the oil level is below the lower dip-stick mark. Refill engine oil (see "Specifications") up to upper level mark on dip-stick; do not overfill!

5



Changing Engine Oil

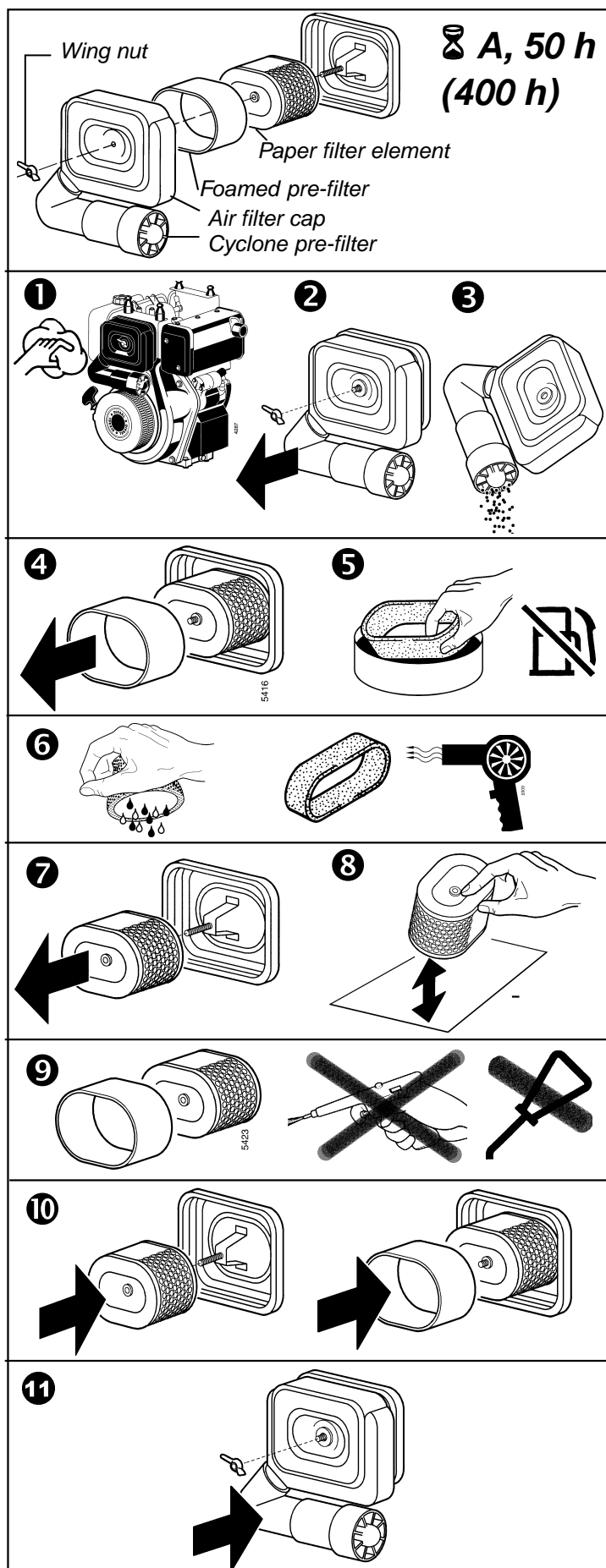
The first oil change is **after 50 operating hours**. Subsequent oil changes are after **200 operating hours** or **once a year**, depending on which period is completed first. At extreme strain and high temperatures, change oil after **100 operating hours** while the engine is still warm, but not hot – **danger of burns!**

- Clean oil filler plug, drain plug and surrounding parts.
- Open the filling plug and the drain plug and drain the oil into a suitable container and dispose of properly!
- Each time you change engine oil, wash engine oil filter in diesel fuel. Replace damaged filter.
- Fill fresh engine oil into the oil filling opening.



Check sealing washer for good condition and exchange, if necessary!

Refer to specifications for oil quantity and quality. Use a funnel or a similar device to fill the oil reservoir.



Dry-Type Air Filter

When you take up operation check the air filter (J/4) on dirt, clean it if necessary.

Clean air filter (J/4) after a maximum of every **50** operating hours or at least after **3 months**, in case of heavy dust occurrence even earlier.

1 Clean air filter and outside surrounding parts.

2 Remove the wing nut and air filter cap including the cyclone pre-filter.

3 Rotate the air filter cap to allow any dirt inside the cyclone pre-filter drop out.

4 Carefully remove foamed pre-filter.

5 Wash foamed pre-filter in detergent and water (no petrol).

6 Squeeze foamed pre-filter and dry it.

7 Remove paper filter element

8 Slightly tap the element on a smooth surface.

9 Do not use compressed air to blow out dust of foamed pre-filter and paper filter element. Do not treat with oil.

10 Re-insert the filter element and attach the foamed pre-filter.

11 Reposition air filter cap and fasten with wing nut.

Replace paper filter element after every **400** operating hours or **at least once a year**.

i Replace immediately damaged filter elements.

5

Draining fuel

- Provide a proper container with funnel or similar.
- Remove the drain plug (16) and drain the fuel into a proper container.
- Re-attach the drain plug (16) with O-ring and tighten it (check the O-ring and replace it if necessary)

Fuel filter

Clean the fuel filter insert at approx. **200** operating hour intervals, earlier, if engine output drops.

Filter disassembly/assembly:

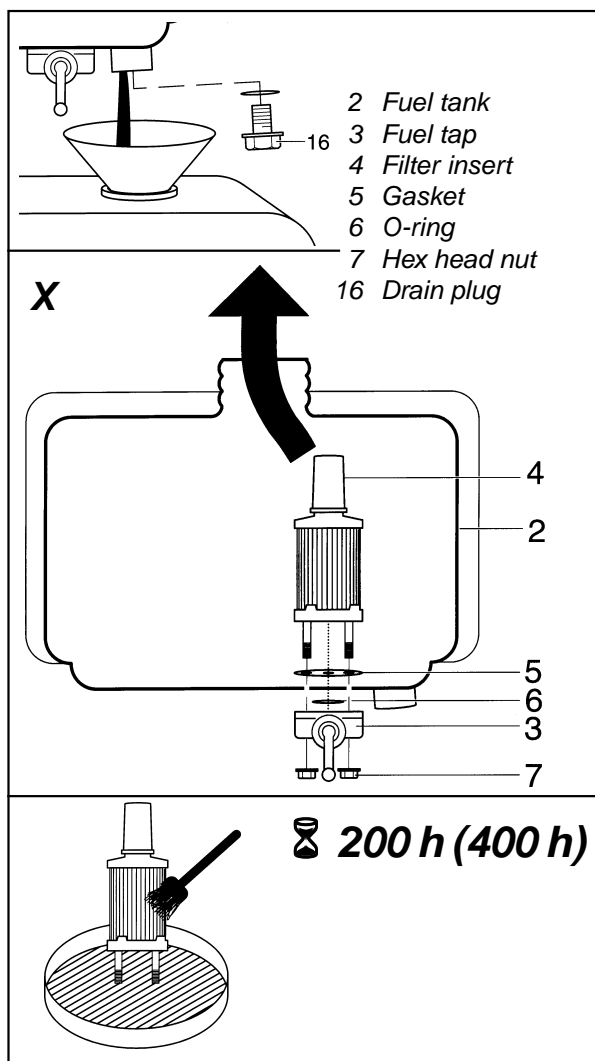
- Drain the fuel.
- Remove hex head nuts (X/7)
- Remove the filter insert (X/4) from the fuel tank through the filling hole.
- Clean the fuel filter with diesel oil and replace the insert if it is damaged.
- Reverse the above order to reassemble the fuel filter after checking and replacing (if necessary) the gasket (X/5) and o-ring (X/6).

5

- Tighten the hex nuts.
- Fill fuel and check the fuel system for leakages.
- Bleed the fuel system.
- Exchange the fuel filter after **400** hours.

Fuel Hoses

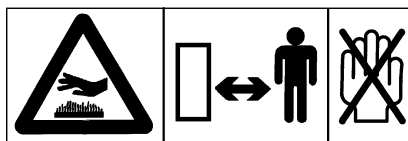
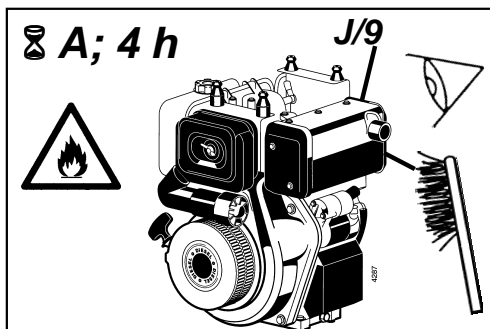
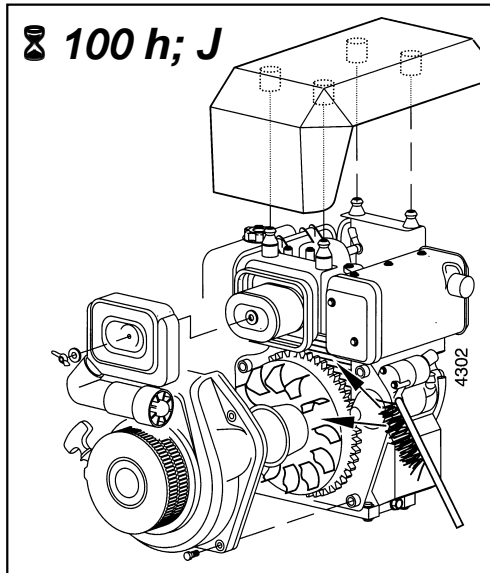
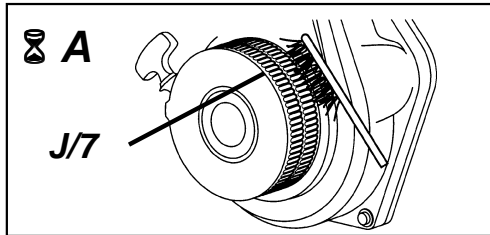
Exchange after every **2 years**; exchange leaking fuel hoses immediately.



Bleeding the Fuel System

The engine is equipped with an automatic bleeding system, however after the fuel tank was emptied completely or after exchanging or cleaning the fuel-filter/fuel hoses proceed as follows:

- Fill diesel fuel into fuel tank.
- Crank engine several times with recoil starter or electric starter and start engine.
- Let engine run for approx. 1 minute.



Cleaning the Cooling System

After a long period of operation the cooling system may become clogged by dirt and plant trash. Uninterrupted operation with a clogged cooling system causes the engine to heat up and become damaged.

- Always check cooling-air screen (J/7) and free from dirt and plant trash taken in.
- After every **100** operating hours or at least **once a year** before season starts remove fan case to clean cooling fins on cylinder and cylinder head as well as guiding plates and cooling-air screen, both serving for smooth air circulation.

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Exhaust System

Constantly check exhaust system (J/9) for plant trash and clean, if necessary. Otherwise **danger of fire!**

Check each time before you take up operation.
Replace any damaged silencers.

Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.

5

Idling Speed

Always ensure that idling engine speed is adjusted correctly. At low speeds, the engine is supposed to run smoothly, with speed control lever at stop in neutral.

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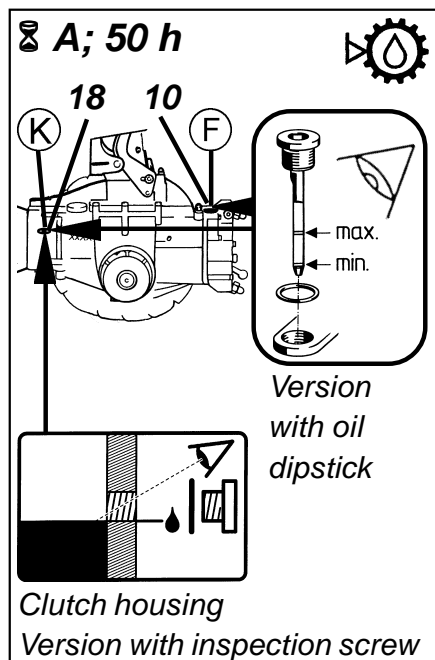


Please observe that only those activities are described here which are required for operating the two-wheel tractor.

All other information on the engine may be taken from the enclosed engine operating instructions!

Machine

Oil level



Check in the **clutch housing** (K) and in the **drive** (F) every time before starting and after every 50 operating hours (oil dipstick and opening for oil filling) (10 or 18). With the tractor parked in horizontal position, the oil level is between the notches “max” and “min”.

- Screw out oil dip-stick, clean with clean cloth and screw back in.

- Take dip-stick out again and read oil level, refill transmission oil, if necessary.

Depending on the version, there may also be an inspection screw on the **clutch housing** (K) in place of the oil dipstick; for this check the oil level as follows:

- Unscrew the inspection screw. If the machine is in a horizontal position the oil level must be at the level of the inspection screw opening, top up with gearbox oil where necessary.

- Replace oil dipstick or re-screw and tighten inspection screw.

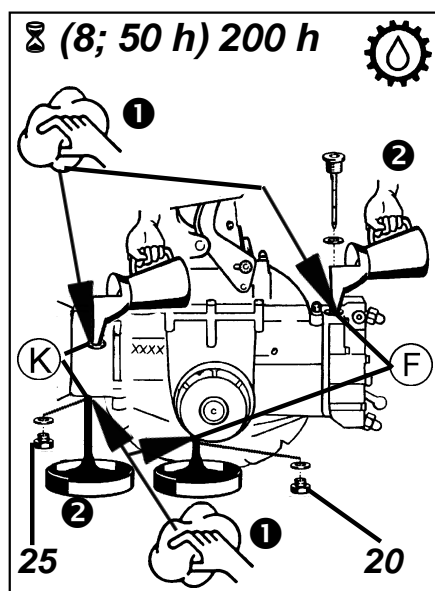
Oil change

- In the **clutch housing** (K) after the first 8 and then after every 200 operating hours
- in the **gearbox** (F) after the first 50 and then after every 200 operating hours, in each case in a warm state after operation carry out the following:

- 1 Clean oil filler plug (10 bzw. 18) and drain plug (20 bzw. 25) as well as surrounding parts.

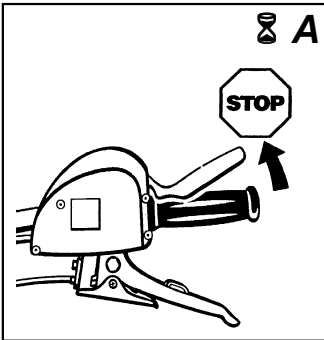
- 2 Change the oil and dispose of properly.

The oil drain screw (25) on the clutch housing is fitted with a magnet. Any metal dust on this must be removed. Screw and tighten the oil drain screw on the clutch housing.



Check sealing washer for good condition and exchange, if necessary!

- For transmission oil quality refer to “Specifications”



Safety circuit

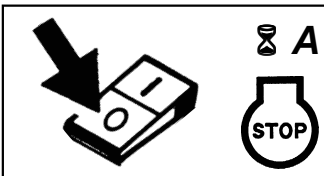
Check safety circuit function each time you take up operation and each time you maintain the machine.

- When releasing the lever (B/4; D/4; F/4; H/4) the main and PTO drives must come to a halt independently (disengaging), check electric cabling, switches and relays where necessary.

→agria - Service←

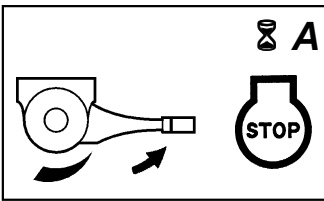
Engine Shut-off Switch

Check function of engine shut-off switch each time you take up operation and each time you maintain the machine.



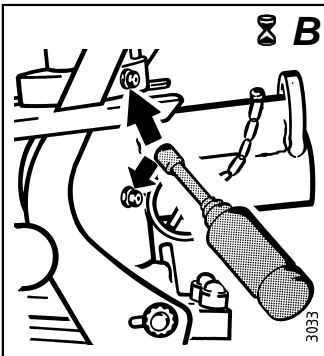
- **Petrol engine:** With shut-off switch (B/15; F/15) in position "0" the engine must come to a stop. If necessary, check electric lines and connections.

→agria - Service←



- **Diesel Engine:** If the speed control lever (D/9; H/9) is in "STOP" position, the engine must come to stop. If necessary, correct engine speed cable or STOP-Bowden cable on Bowden cable set screws.

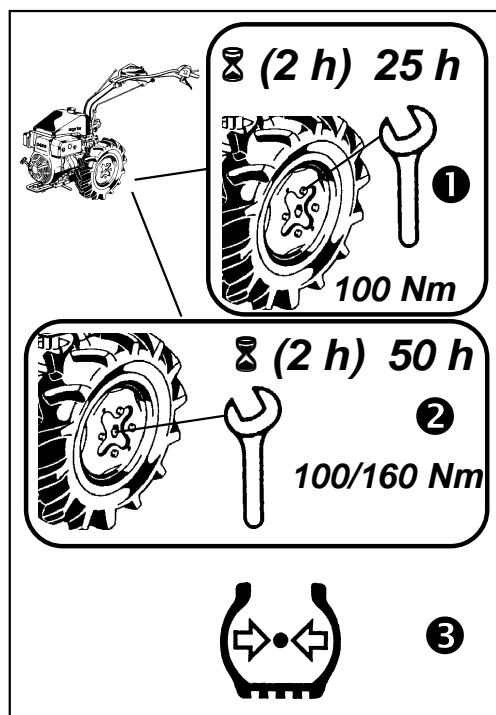
→agria - Service←



Steering Handle

- **Yearly** lubricate nipples on steering handle and hitch. After cleaning with compressed air, lubricate with bio-lubricating grease.

Apply grease generously to leave a grease neck around bearings to prevent water and dirt from penetrating.

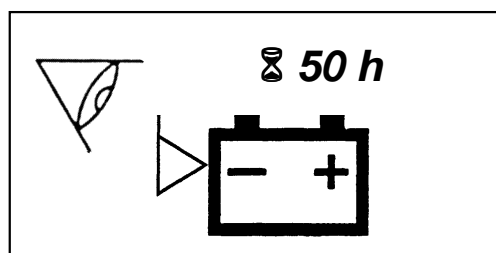


Drive-Wheels

① When commissioning the tractor and each time you change wheels, check and tighten wheel bolts and nuts after the first 2 operating hours with **100 Nm** (10 kpm). Proceed likewise when doing maintenance work.

② After the first **two** operating hours and after every **50** operating hours, retighten the hex nuts (A/22; C/22) on the hub adapters to **100 Nm** and the nuts (E/23; G/23) on the wheel hubs to **160 Nm**.

③ Check tyre air pressure regularly. For smooth driving, make sure that there is the same pressure in front and rear tyres respectively.



Battery

There is no dry pre-charge of batteries on new machines or trailers, therefore batteries must be totally charged after filling them with accumulator acid (charge current = 1/10 of battery capacity).

If the machine or trailer will not be used for a long period, the battery must be kept fully charged with a current of 0.06A and checked every 4 weeks and recharged, if necessary.

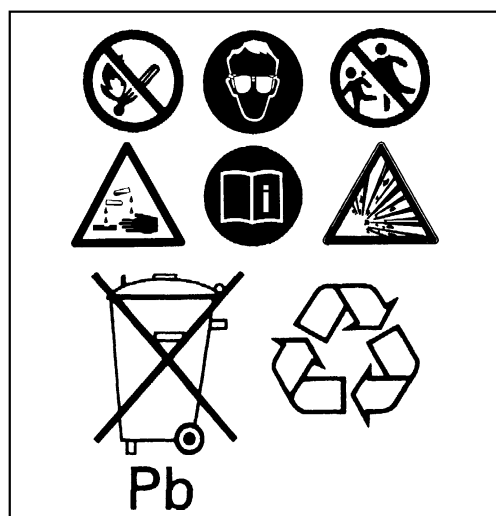
Before recharge, disconnect negative pole - otherwise there is a risk of damage to the electronics!

⚠ Never leave battery in uncharged state!

Note manufacturer's instructions! Avoid sparking and open flames near batteries. Careful when handling battery **acid!**

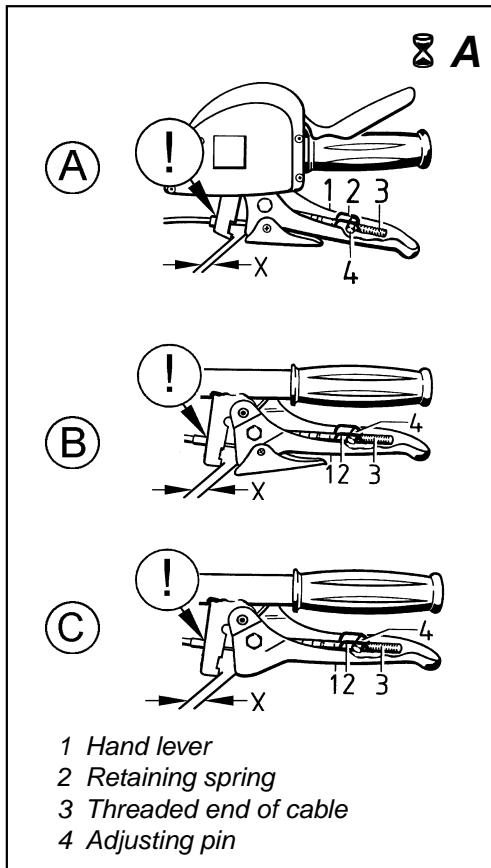
Only use specified circuit breakers. If circuit breakers are too strong, the electric system will be destroyed

⚠ danger of fire!



Adjustments on Levers

Check clutch play or clutch adjustment each time you operate the machine. If necessary, re-adjust (especially after commissioning the machine, during break-in period, and after exchanging brake pads).



(A) Clutch: $X = 0 \text{ mm}$

! The switch for the solenoid clutch has a short shifting travel and in order that its function can be guaranteed the clutch lever must always be located at the lever bearing when it is in a released state.

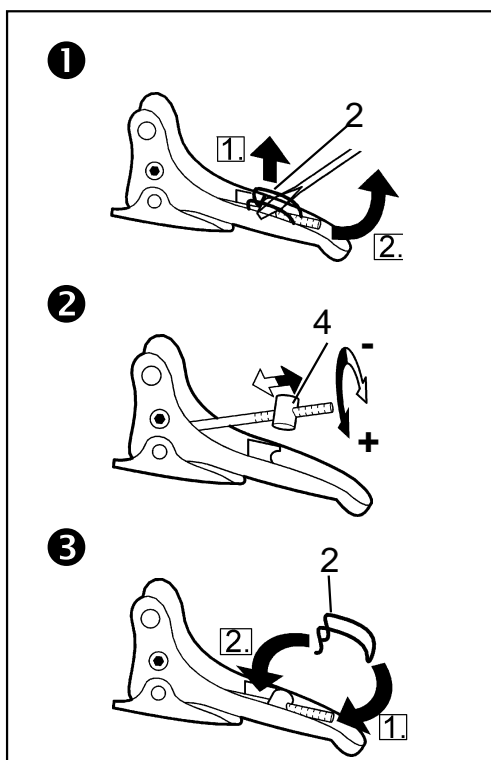
! = The Bowden cable must be placed in the hand lever support in the **bottom** position!

(B) Differential gear: $X = 3 - 5 \text{ mm}$

! = The Bowden cable must be placed in the hand lever support in the **upper** position.

(C) Lenkbremse: $X = 3 - 5 \text{ mm}$

! = The Bowden cable must be placed in the hand lever support on in the **upper** position.

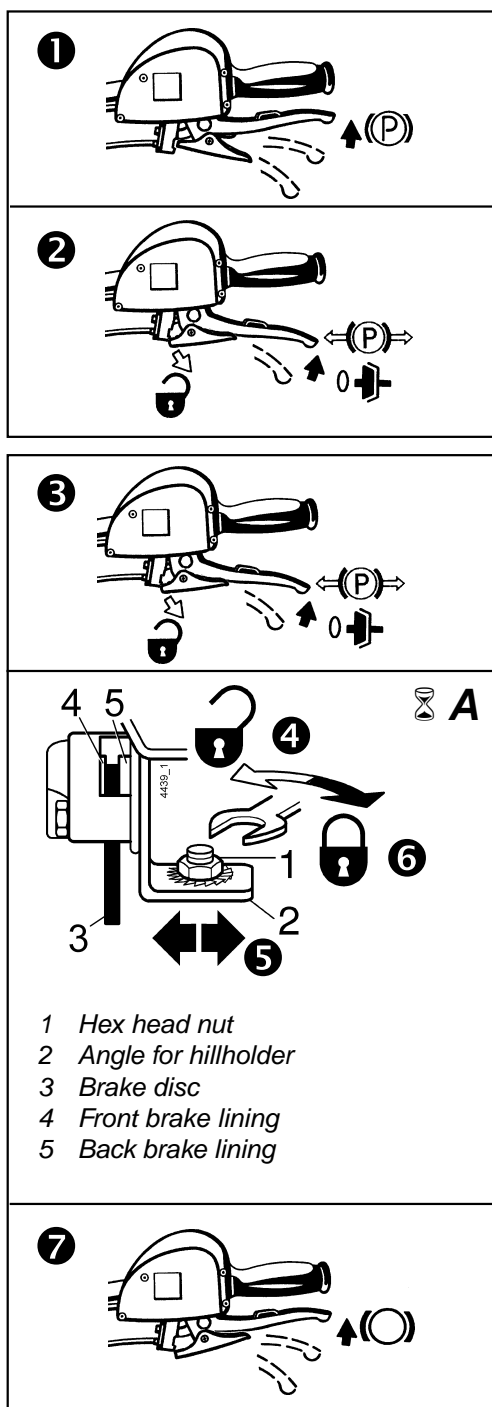


Adjustment:

1 1. Remove retaining spring (2)
2. remove cable end (3) and adjusting pin (4) out of bracket in hand lever.

2 Adjust the adjusting pin (4) (+ -) to a play of X.

3 1. Place cable end and adjusting pin back into bracket
2. fit retaining spring (2).



Safety Hillholder

Differential version, but not Overdrive

● Every time you start operation, check the safety hillholder and hand brake on proper function.

❶ The brake must be fully effective when the clutch lever is pulled in and the ratchet is engaged.

❷ When the clutch lever is pulled in half-way the brake must be released.

Setting is made using the adjusting pin in the clutch lever (see page 75) - the setting of the clutch may, however, not be affected by this.

In cases where the setting with the adjusting pin is insufficient the basic setting on the disc brake housing must be changed.

Basic setting of the Disc Brake

❸ Set the clutch lever to the position "Brake released" ←(P)→ and hold.

❹ Loosen the hex head nuts (1) on both sides.

❺ Move the park brake carter against the brake disc (3) by a slight pressure on the brake carter until the brake shoe (4) fits slightly.

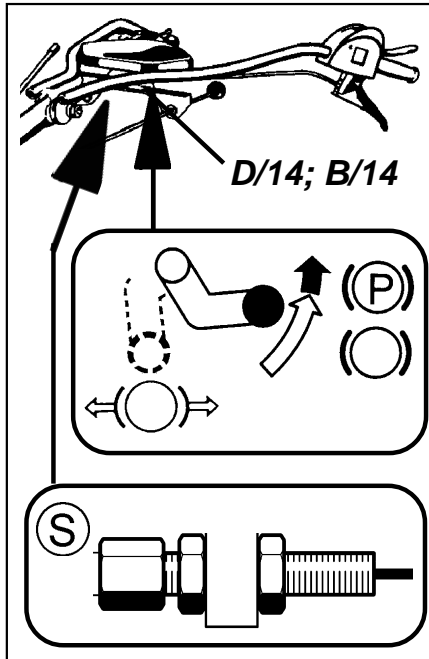
❻ Fasten the hex head nuts (1) on both sides.

❼ Check the effectiveness of the brake, fine set where necessary using the adjusting pin in the clutch lever or readjust.

❽ Check the brake free wheel.

● F-R shifter on "idle"

● The brake disc must turn easily by hand, re-adjust if necessary.



Central Brake

Version 3400 Differential with Overdrive

● Check the effectiveness of the parking brake every time before starting.

❶ Where the eccentric lever is swung back at the top over the slack point (B/14; D/14) the brake must be fully effective.

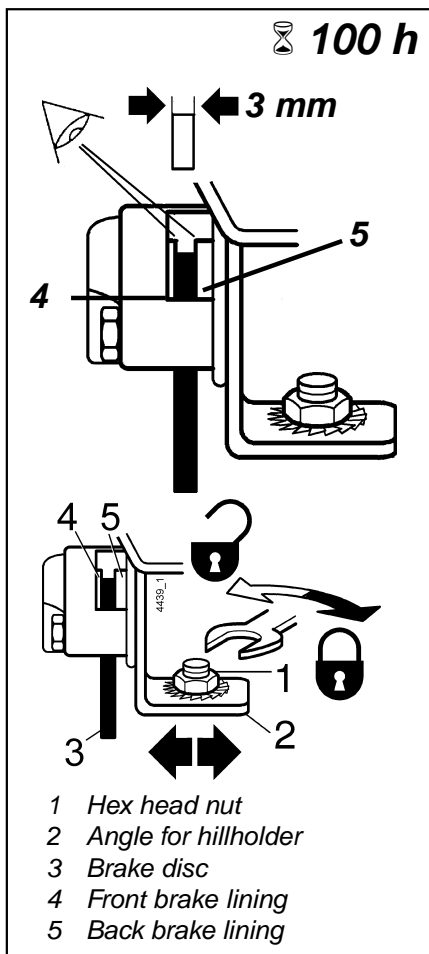
❷ Where the eccentric lever is swivelled down the brake must be released.

The setting is made using the Bowden cable adjusting screw (S) under the tool box.

In cases where the setting with the Bowden cable adjusting screw is insufficient the basic setting on the disc brake housing must be changed (see page 76).

Version 3400 KL (steering brake clutch)

Checking as for Version 3400 Differential with Overdrive, however the setting is made using the threaded rod on the beam under the tool box.



Disc Brake

Version 3400 Differential with Safety Hillholder und Overdrive

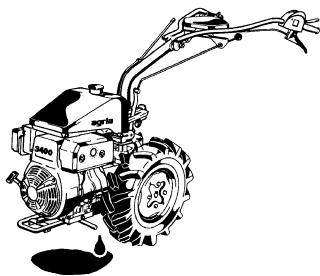
Checking brake pad

After every 100 operating hours make a visual check of the brake pads (4 + 5) for wear. The pads should have a minimum thickness of 3 mm, where necessary replace pads.

Replacing brake pads

- Loosen hexagonal nut (1) on both sides and unscrew
- Remove angled bracket (2) with disc and brake housing
- Replace brake pads (4 + 5)
- Re-assemble disc brake in reverse order to above
- Carry out setting (see page 76).

1



2



3



General Maintenance

1 Every time you take up operation watch out for fuel and oil leakage, repair if necessary.

2 Regularly check bolts and nuts for tight fit, re-tighten, if necessary.

3 At least **once a year** and after cleaning: Slightly grease all gliding and moving parts (e.g. speed control lever, lever bearing, etc.) with bio-lubricating grease and bio-lubrication oil.

Cleaning

Engine

Clean engine only with a cloth. Avoid spraying with air-compressed water jets, as water might leak into ignition and fuel system causing malfunctions.

Machine

After each operation immediately clean the tilling tools and the protective hood. Therefore dismount the protective hood. Grease all gliding parts with Bio-ubricating grease and Bio-slushing oil.

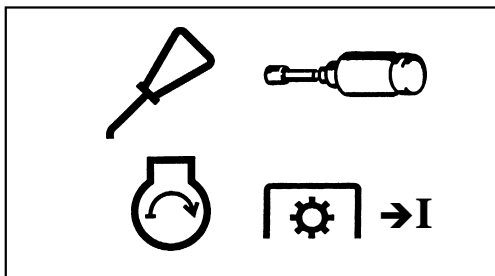
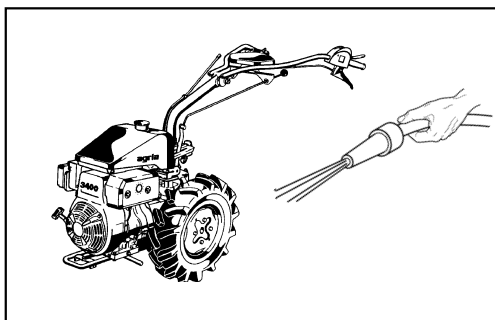
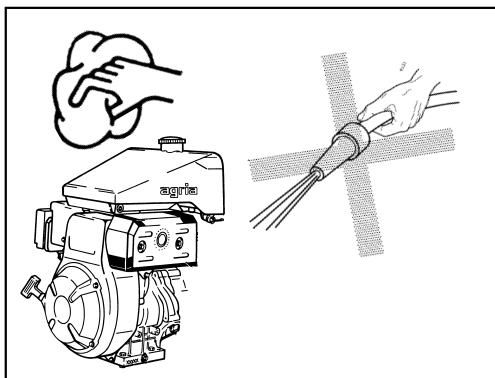
After each cleaning with air-compressed water jets lubricate all lubrication points, oil and let two-wheel tractor run for a short time to press water out.

Apply grease generously to leave a grease ring around bearings to prevent water, plant sap, and dirt from penetrating.

Graphic Symbols

Worn and missing stickers with operating and safety instructions must be replaced.

5



Storage

For longer periods of no operation prepare two-wheel tractor for storage. Proceed as follows:

a) Clean thoroughly

Repair paint coat.

b) Spray all shining parts and the cutter bar with Bio-slushing oil.

c) Engine preservation

● **Petrol Engine**

– Drain fuel completely or fill fuel tank and add fuel stabilizer (agria No. 799 09). - **Observe enclosed instructions.** Let engine run for approx. 1 minute.

– Change the engine oil.

– Fill a tea-spoon (approx. 0.03l) of engine oil into the spark plug opening. Slowly crank the engine.

– Reinstall the spark plug and set the piston to compression via the recoil starter (pull the starter grip until resistance is felt) – valves are closed.

– Slowly crank the engine after every 2–3 weeks (spark-plug connector is removed). Then set the piston to compression again.

● **Diesel Engine**

– Change engine oil.

– For longer storage, close exhaust pipe and air filter opening with crape or similar tape.

d) Drive-wheels

Support drive-wheels in such a way that tyres have no ground contact. Pneumatic tyres are quickly destroyed, if left standing under load and unsupported.

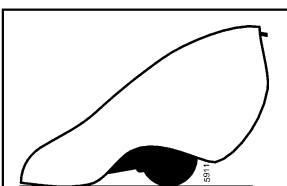
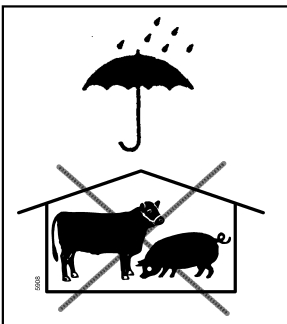
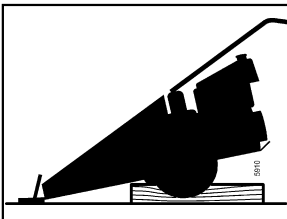
e) Parking

Because of severe corrosion **do not park the tractor**

- in humid rooms
- in rooms where fertilizer is stored
- in stables or adjacent rooms.

f) Covering the machine

Protect the machine with cloth or a similar cover.



6. Troubleshooting

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Observe safety instructions! Have all serious malfunctions on the machine or engine repaired by your agria workshop. They have the proper tools. Improper repairs can only add to the damage.

Problem	Possible cause	Possible solution	Page
Petrol engine:			
Engine does not start	- Spark plug connector not connected	Connect spark plug connector	
	- Choke is not pulled	Set choke lever to position CHOKE	50
	- Engine shut-off switch is set to "0"	Set engine shut-off switch to "I"	50
	- Fuel tank empty or poor fuel	Fill fresh fuel	
	- Fuel line clogged	Clean fuel line	BM
	- Defective spark plug	Clean, adjust or exchange spark plug	BM
	- Engine too much fuel ("flooded engine")	Dry and clean spark plug and start at full throttle	BM
	- Engine-off-line defective	Check line and connections	*
	- Inleaked air due to loose carburetor and suction line	Tighten attachment bolts	
Misfirings in engine	- Engine running in CHOKE range	Set CHOKE lever to operating position	50
	- Loose ignition cable	Fix ignition cable retaining device, fit connector tightly on ignition cable, fit connector tightly on spark plug	
	- Clogged fuel line or poor fuel	Clean fuel line, fill fresh fuel	*
	- Vent opening in fuel tank cap clogged	Exchange fuel tank cap	
	- Water or dirt in fuel system	Drain fuel and fill fresh fuel	
	- Air filter clogged	Clean air filter or exchange	65
	- Carburetor misadjusted	Re-adjust carburetor	* BM
Excessive temperature in engine	- Low engine oil level	Refill oil immediately	64
	- Impaired cooling	Clean cooling fan grid, clean internal cooling fins	66
	- Air filter clogged	Clean air filter	65
	- Carburetor misadjusted	Re-adjust carburetor	* BM
6 Misfirings in engine at high speeds	- Short firing intervals	Adjust spark plug	66, BM
	- Incorrect idle mixture	Adjust carburetor	* BM
Engine frequently stalls in idle	- Firing interval too long, defective spark plug	Adjust or replace spark plug	66, BM
	- Carburetor misadjusted	Re-adjust carburetor	* BM
	- Air filter clogged	Clean air filter	65

6. Troubleshooting

Problem	Possible cause	Remedy	Page
Engine does not run smoothly	- Speed control linkages clogged or jammed	Clean speed control linkages	67
Engine does not stop when set to stop	- Defective electric cabling - Earth missing - Defective engine shut-off switch	Check cable and connection Check ground contact Replace switch	
Engine output too low	- Air filter clogged - Loose cylinder head or damaged gasket - poor compression	Clean air filter Tighten cylinder head, exchange gasket Have engine checked	65 * *
Diesel engine:			
Engine does not start	- Speed control lever set to "STOP" - Fuel tank empty or poor fuel - Fuel line or fuel filter clogged - Injector nozzle or injection line clogged - Wrong injection pressure	Move speed control lever to "Max" Fill fresh fuel Clean fuel line or filter Clean injector nozzle or injection line Check pressure	52, 53 70 * BM *
Misfirings in engine	- Clogged fuel line or poor fuel - Vent opening in fuel tank cap clogged - Water or dirt in fuel system - Air filter clogged - Injector nozzle or injection line clogged	Clean fuel line, fill fresh fuel Exchange fuel tank cap Drain fuel and fill fresh fuel Clean air filter Clean injector nozzle or injection line	 69 * BM
Excessive temperature in engine	- Lack of engine oil - Impaired cooling	Refill engine oil immediately Clean fan grid, clean internal cooling fins	68 71
Misfirings at high speeds	- Injector nozzle clogged - Wrong injection pressure	Clean injector nozzle Re-adjust injection pressure	* BM
Engine frequently stalls in idle	- Air filter clogged	Clean air-filter	69
Engine does not stop when set to "STOP"	- Improper adjustment of Bowden cable for setting of speed	Re-adjust Bowden cable	73

6. Troubleshooting

agria

Problem	Possible cause	Remedy	Page
Diesel engine output too low	- Air filter clogged - Loose cylinder head or damaged gasket - Poor compression	Clean air filter Tighten cylinder head, exchange gasket Have engine checked	69 * *
E-Start version:			
E-starter does not start	- Battery is empty - Defective fuse - Harness, E-starter damaged	Charge or replace the battery Replace the fuse Inspect harness and E-starter	47; 74 46 *
Beeper for charge warning does not sound when engine stops	- Start switch not activated - Defective beeper - Defective fuse - Harness is damaged - Defective regulator	Move start switch to "I" Replace beeper Replace the fuse Inspect harness Inspect regulator	46 * *
Beeper sounds during operation	- Defective fuse - Harness is damaged - Defective regulator - Defective generator	Replace the fuse Inspect harness Inspect regulator Replace generator	46 * * *
Machine in general:			
Clutch does not decouple	- Clutch lever misadjusted	Adjust clutch free play	75
Clutch does not engage	- Defective fuse - Soft start module overheated - Defective electric switch (clutch and safety circuit) - Harness is damaged - Defective relay - Defective soft start module	Replace the fuse wait until soft start module has cooled down Replace switch Inspect harness, esp. connections Replace relay Replace soft start module	46 32
Excessive vibration	- Loosened attachment bolts	Tighten attachment bolts	74

* = For this purpose contact your agria workshop.

BM = See engine operating instructions!

agria Order No.

Fuel Stabilizer for Petrol Engine

799 09	Fuel stabilizer	pouch	5g
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Varnishes

181 03	Spray varnish birch-green	spray tin	400ml
712 98	Spray varnish red, RAL 2002	spray tin	400ml
509 68	Spray varnish black	spray tin	400ml

Glues (for screw fastening), Surface Sealing

559 94	Glue (medium) LOCTITE 242	bottle	50ml
559 95	Glue (strong) LOCTITE 270	bottle	50ml
559 96	Glue (ultra strong) LOCTITE 638	bottle	50ml
509 68	Surface sealing (liquid) LOCTITE 573	tube	250ml

Wear Parts

707 91	Air filter set, Robin engine
707 92	Spark plug, Bosch WR7CC
684 16	O-ring, oil dip-stick, Robin engine
009 05	O-ring 14x20x1.5, oil drain plug, Robin engine
415 008	Air filter element, Yanmar engine
415 010	Fuel filter, Yanmar engine
415 011	Fuel filter gasket, Yanmar engine
021 43	O-ring 14x1.6, Fuel tap, Yanmar engine
009 16	O-ring 16x22x1.5, oil drain plug, Yanmar engine
778 56	Glass fuse 20A (30x6.5mm)
760 10	Flat plug fuse 10A
009 16	O-ring 16x22x1.5, oil drain plug, gearbox
740 17	O-ring 17x21x1.5, oil dip-stick, gearbox

Lists of Spare Parts

997 012	Base machine 3400
997 083	Implements for 3400
997 077	Robin Engine
997 147	Yanmar Engine
997 062	Cutter Bar

Noise level and Vibration acceleration value

agria

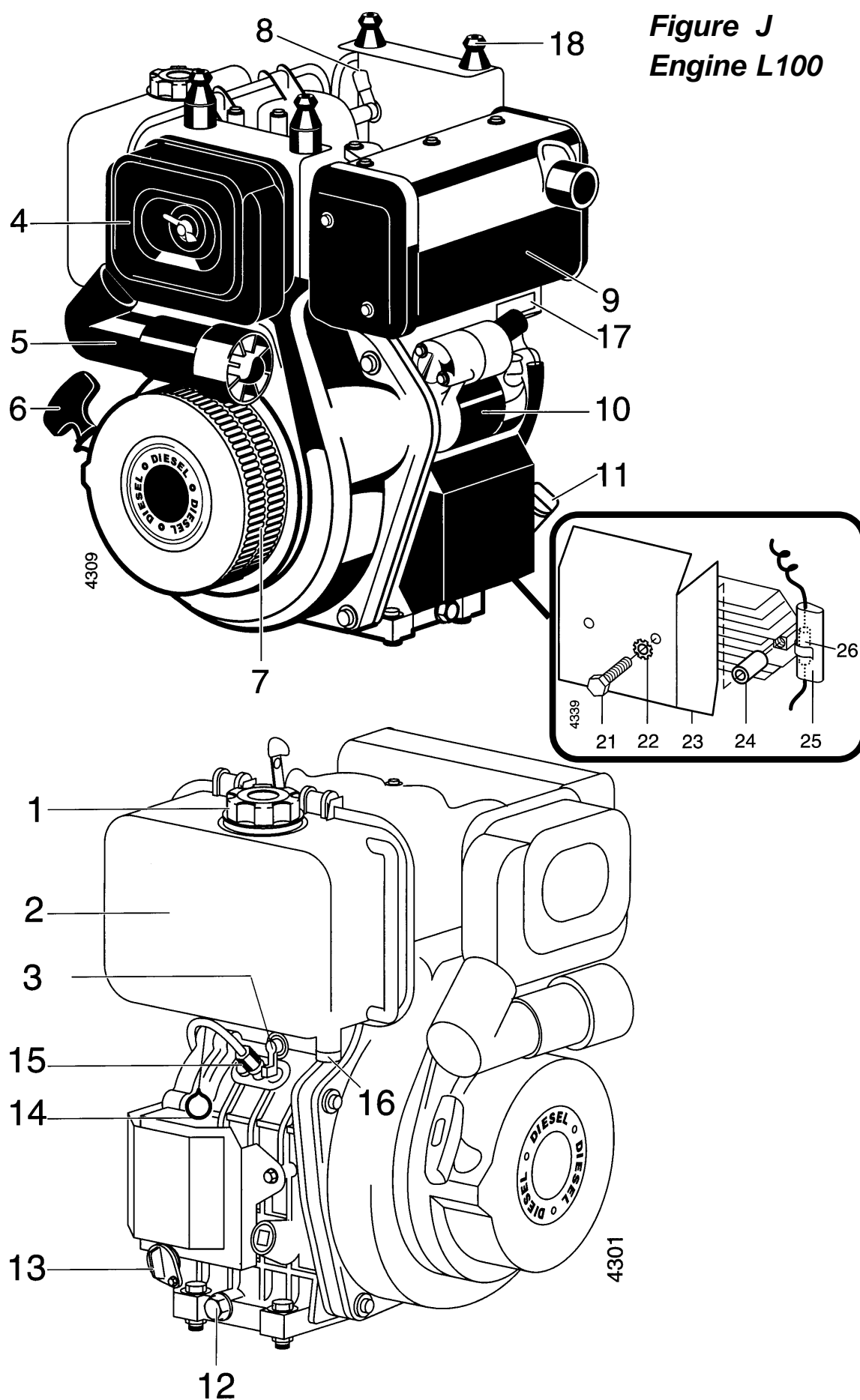
		Engine version		
		Robin EH 34	Yanmar L100N	
Noise level:				
Noise level (in general accordance with DIN EN 12733: 2001) at the operator's ear with:				
Hoeing equipment 70 cm	$L_{pA} =$	86 dB	88 dB	
Front mounted power harrow 90 cm	$L_{pA} =$	87 dB	89 dB	
Safety Mulcher 85 cm	$L_{pA} =$	86,8 dB	96 dB	
Acoustic power level to guideline 2000/14/EG, appendix III, part B, chapter 32 lawn mower with:				
Hoeing equipment 70 cm	$L_{WA} =$	98 dB	100 dB	
Front mounted power harrow 90 cm	$L_{WA} =$	99 dB	101 dB	
Safety Mulcher 85 cm	$L_{WA} =$	107 dB	108 dB	
Vibration acceleration value:				
to guideline 2002/44/EG and EN 709: 1997 + A4: 2003 at the handlebar with:				
Hoeing equipment 70 cm	$a_{hw} =$	3,8 m/s ²	4,7 m/s ²	
Front mounted power harrow 90 cm	$a_{hw} =$	4,3 m/s ²	5,2 m/s ²	
Safety Mulcher 85 cm	$a_{hw} =$	4,7 m/s ²	5,6 m/s ²	

Figure J

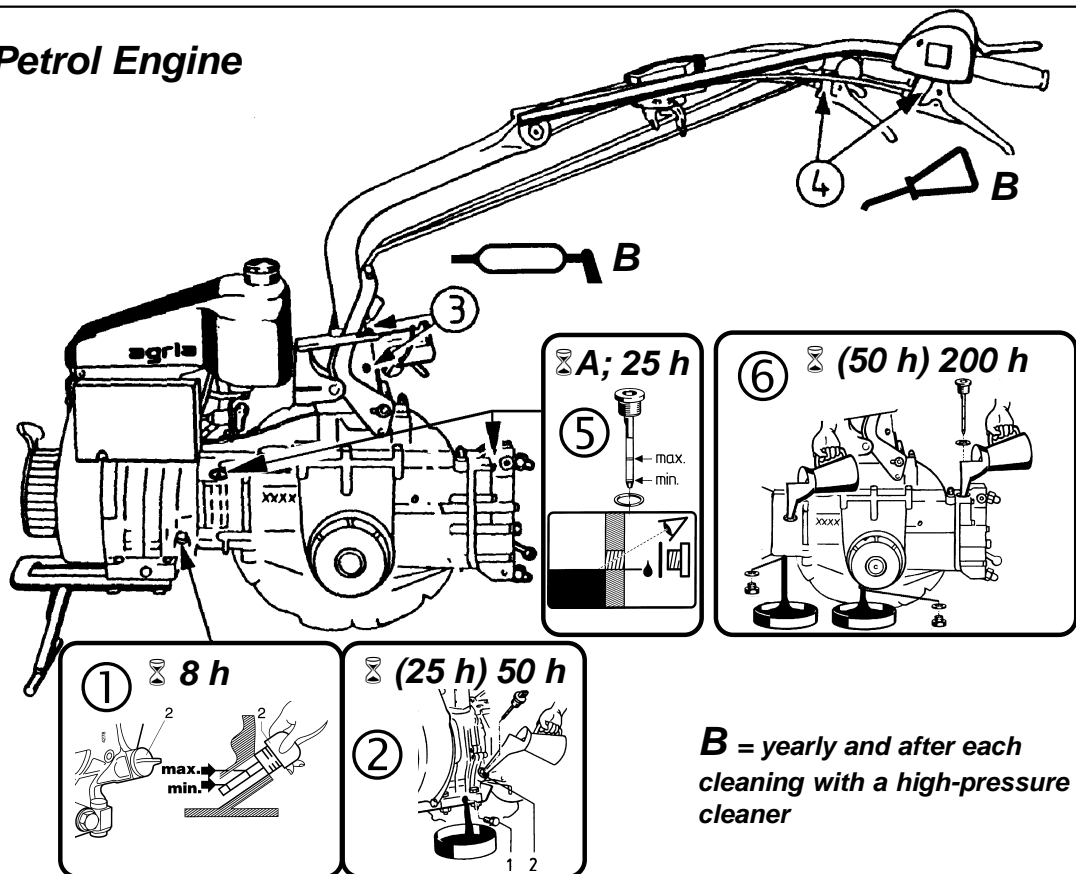
Engine L100

- 1 Fuel tank cap
- 2 Fuel tank
- 3 Fuel tap
- 4 Air filter
- 5 Preliminary air filter
- 6 Starter grip
- 7 Cooling air grille
- 8 Decompression lever
- 9 Exhaust
- 10 Electric switch (E-Start Version)
- 11 Engine oil filler opening, dip-stick
- 12 Engine oil drain plug
- 13 Engine oil filter
- 14 Decompression cable
- 15 Injection pump
- 16 Fuel drain plug
- 17 Engine type plate; engine I.D.
- 18 Ball-head, engine cover
- 21 Hex head bolt (E-Start Version)
- 22 Serrated washer (E-Start Version)
- 23 Panel (E-Start Version)
- 24 Distancer (E-Start Version)
- 25 Fuse holder (E-Start Version)
- 26 Glass fuse 20 amps (E-Start Version)

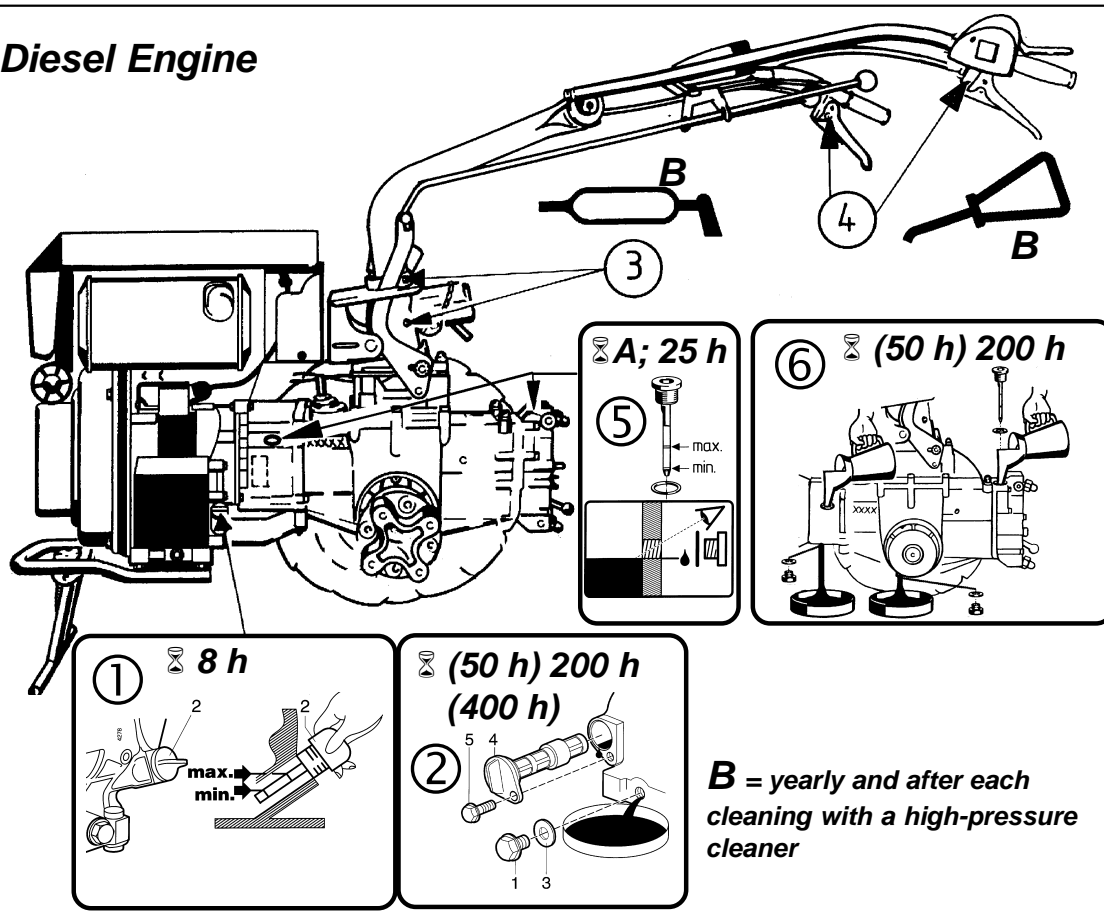
Figure J
Engine L100



Petrol Engine



Diesel Engine



		P	A	After operating hours								min. every 3 months	min. yearly	B	page
				2	5	8	25	50	100	200	400				
Check dead stop			K												73
Check engine shut-off switch			K												73
Check free play of levers			K												75
Check safety hillholder	○		K												76
Clean cooling-screen			K												66; 71
Check air-filter			K												65; 69
Clean surrounding parts of exhaust			K		K										67; 71
Check engine oil level, refill, if necessary		1	K			K									64; 68
Check transmission oil level		2	K					K							72
Retighten the hex nuts on the hub adapters and the nuts on the wheel hubs				K				K							74
Tighten wheel bolts and nuts				K			K								74
Check or clean speed control linkages	■					K									67
Cleaning							K								78
Check bolts and nuts							K								78
Clean air-filter insert	■						K					K			65
Clean air-filter insert	◆							K				K			69
First engine oil change,	■						W								64
subsequent oil changes	■							W							64
First engine oil change,	◆							W							68
subsequent oil changes	◆									W					68
Clean engine oil filter first time,	◆							W							68
subsequent cleaning	◆									W					68
First transmission oil change,								W							72
subsequent oil changes										W					72
Clean spark plug, adjust electrode gap	■								K						66; BM
Check brake liners of safety hillholder	○								K						76
Lubricate differential hubs of twin-wheels									K					K	43
Clean guide plates, cooling fins – earlier, if required									F				F		66; 71
Replace spark plug	■									K					66
Replace air filter insert, earlier, if required	■									K					65
Clean fuel filter	◆									W			W		70
Replace air filter insert, earlier, if required	◆										K				69
Replace fuel filter	◆										W				70
Clean carburetor and adjust	■									F					BM
Clean cylinder head	■									F					BM
Clean injection jet and check	◆									F					BM
Adjust valve lash										F					BM
Lubricate steering handle/trailer hitch		3											K	K	73
Lubricate all gliding parts		4											K	K	78
Replace fuel hoses													W*		67; 40

Figure K

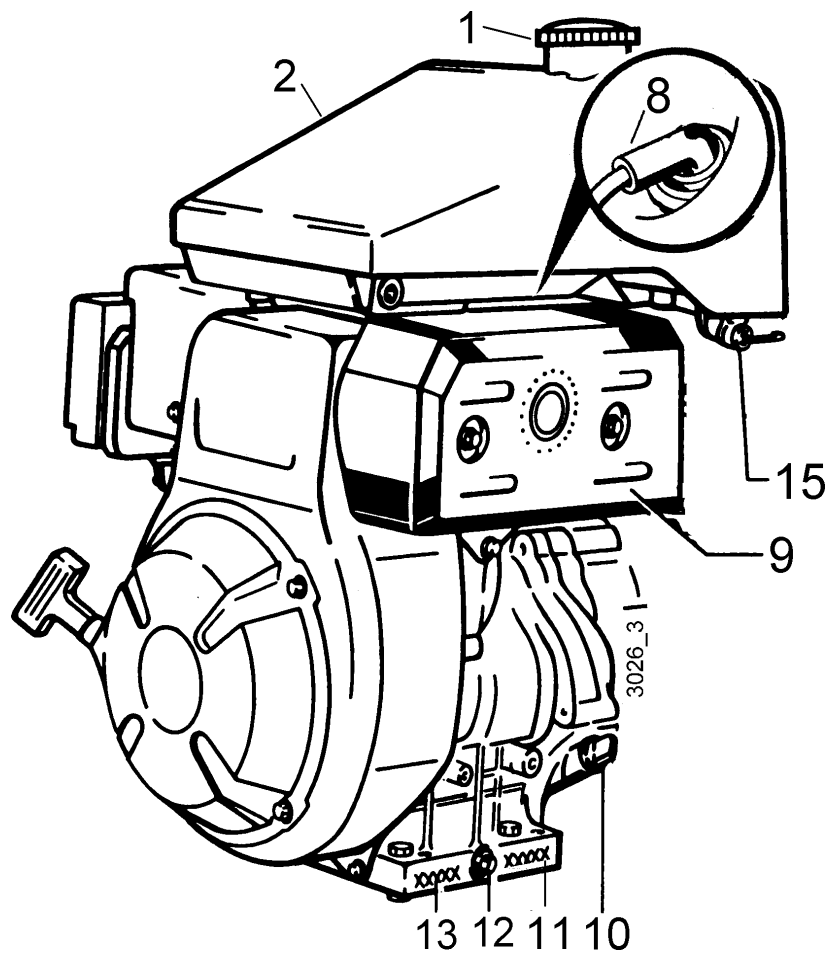
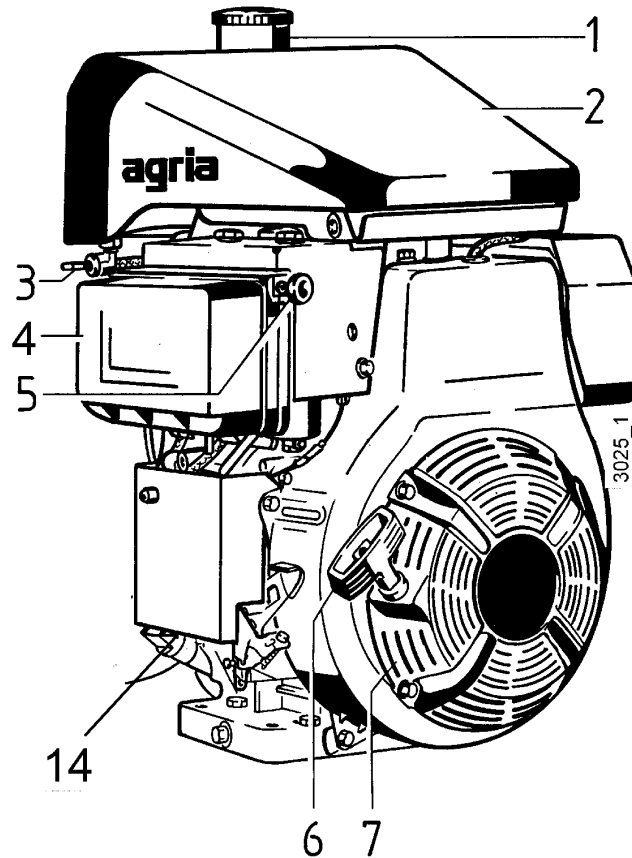
Engine EH 34 D

- 1 Fuel tank cap
- 2 Fuel tank
- 3 Fuel tap, right
- 4 Air filter
- 5 Choke pull-knob
- 6 Starter handle
- 7 Recoil starter/air-cooling screen
- 8 Spark plug connector
- 9 Exhaust
- 10 Engine oil filler neck with oil dip-stick
- 11 Engine type
- 12 Engine oil drain plug
- 13 Engine ID no.
- 14 Speed control lever and linkages
- 15 Fuel tap, left

Legend for inspection and maintenance chart

- = Petrol Engine only
- ◆ = Diesel Engine only
- = only vers. with safety hillholder
- P = Item in lubrication plan
- A = Each time before you take up operation
- B = After each cleaning
- K = Checks and maintenance to be executed by operator
- W = Maintenance to be executed by professional workshop
- F = Maintenance should be carried out by your agria workshop
- * = after 2 years
- BM = see engine operating instructions

Figure K
Engine EH 34 D



(D)

Wir

(F)

Nous

(GB)

We

(NL)

Wij

**agria-Werke GmbH
Bittelbronner Str. 42
D-74219 Möckmühl/Württ.**

erklären, dass das
Produkt

déclarons que le produit

herewith declare that
the product

verklaren dat het
produkt

Einachsschlepper

Motoculteur

Two-wheeled tractor

Eenassige tractor

3400 111,- 113, -131, -411, -413, -421, -423, -431, -441

mit allen einschlägigen
Bestimmungen der EG-
Maschinenrichtlinie
2006/42/EG in
Übereinstimmung ist.
Die Maschine ist auch in
Übereinstimmung mit allen
einschlägigen
Bestimmungen der
folgenden EG-Richtlinien:
2004/108/EG, 2000/14/EG

est conforme à toutes les
exigences respectives
selon la directive relative
aux machines 2006/42/CE.
La machine est aussi
conforme à toutes les
exigences respectives
selon les directives CE
suivantes:
2004/108/CE, 2000/14/CE

conforms to all relevant
specifications of the
Directive on Machinery
2006/42/EC.
It is also conform to all
relevant specifications of
following EC directives:
2004/108/EC, 2000/14/EC

voldoet aan de
desbetreffende bepalingen
van de EG-machinerichtlijn
2006/42/EG.
De machine voldoet ook
aan de desbetreffende
bepalingen van het
volgende EG-richtlijnen:
2004/108/EG, 2000/14/EG

Folgende harmonisierte
Normen (oder Teile davon)
oder techn. Spezifikatio-
nen wurden angewendet:

Les normes harmonisées
(ou extraits de celles ci) ou
les spécifications
techniques suivantes ont
été appliquées:

Following harmonized
standards (or parts of it) or
technical specifications
have been applied:

De volgende
geharmoniseerde normen
(of delen ervan) of
technische specificaties
werden toegepast:

EN 709: 1997 + A4: 2009, EN 12733: 2001 + A1: 2009

Möckmühl, den 22.12.2010



Siegfried Arndt
Geschäftsführer
Directeur
Managing Director
Bedrijfsleider



Rudolf Tigges
Leiter Entwicklung & Konstruktion
Responsable développement et études
Head, Research and Development
Hoofd ontwikkeling en constructie

Herr Tigges ist bevollmächtigt die technischen Unterlagen zusammenzustellen.
Monsieur Tigges est habilité à agencer la documentation technique.
Mr. Tigges is authorized to assort the technical documents.
De heer Tigges is gemachtigd om de technische documentatie op te stellen.
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